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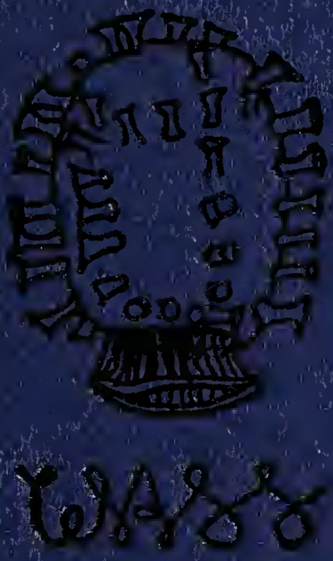

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BLUE JAY

June, 1991

Blue Jay, founded in 1942 by Isabel M. Priestly, is a journal of natural history and conservation for Saskatchewan and adjacent regions. It is published quarterly by the **Saskatchewan Natural History Society, Box 4348, Regina, Saskatchewan, S4P 3W6.**

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Associate Editors: Margaret Belcher, J. Bernard Gollop, Wayne C. Harris, Ronald Hooper, John H. Hudson, Bruce A. McCorquodale, Robert W. Nero, Carol A. Scott

Editorial Assistant: Carman Dodge

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Cover: Trumpeter Swan at Mystrey Lake, south of Greenwater Lake Provincial Park. Photo by Michael Crawford.

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TRIBUTE TO SHEILA LAMONT

The Saskatchewan Natural History Society has recently passed through a change in editorship of the *Blue Jay*. Like her predecessors, Sheila Lamont brought to the position of *Blue Jay* editor a high degree of understanding and competence within a broad spectrum of natural history knowledge. Sheila also pioneered the entry of the Society into the modern era of computer-assisted desk-top magazine publication. The double indemnity of personal time commitments for editing and publishing must be recognized with gratitude.

Sheila, thank you for your contribution to the Society as *Blue Jay* editor. Your tenure has not diminished the size of shoe your successors must fill.

President

SASKATCHEWAN BIRD BANDERS: BAYNTON, ATKINSON AND GOLD*

C. STUART HOUSTON, 863 University Drive, Saskatoon, Saskatchewan. S7N 0J8

Edgar Baynton was born in Halton County, Ontario, on 17 June 1875. When he was 16 his father died and he moved west to his grandmother in Manitoba. He homesteaded north of Maple Creek, Saskatchewan, in 1904.

Edgar Baynton's homestead entries exemplify the difficulty experienced by some homesteaders in trying to make a living from marginal land. His first attempt on 25 April 1904 was for the northeast quarter of section 6, township 14, range 23, west of the Third Meridian (NE 6-14-23w3), 3.5 miles north of Crane Lake on the south edge of the Great Sand Hills. In his ''Declaration of Abandonment'' he swore the following statement: ''I located my homestead on land that is absolutely useless as it is all brush and sand-hills and not the ¼ that I wanted. I resided for a short time on the quarter where I expected my homestead was but after paying for getting it properly surveyed I found I was mistaken and stayed no longer.'' He had built ''one lumber shack worth about $20'' on the land where he thought his homestead was. No cultivation had been done.

Baynton's ''pre-emption'' for an extra 160 acres was on SW 32-14-25w3, and he made entry for this land on 17 May 1909. His house was 16 by 20 feet, valued at $800. His stable, granaries and shed were valued at $700 and his fencing at $200. In 1904 he broke 25 acres and cropped 20. Between 1907 and 1911 he cropped 50 acres each year and from 1913 to 1918, he cropped 60 acres each year. By 1918, he had 30 cattle, 9 horses, 90 sheep (though he had 150 in 1915) and 12 hogs (30 in 1915). He married Margaret Dunkie at Brandon, Manitoba, on 7 June 1919.

On the adjacent section, NE 30-14-25 w3, was his elder brother, John P. Baynton, rancher, with wife and two children. John had been a teacher at Oxford, Ontario, before he moved west to homestead in June 1904.

Edgar planted a beautiful grove of trees on SW 32, but the site has long been abandoned as land unfit for cultivation, reverting to pasture. It is about three miles east of the Bigstick Community Pasture headquarters and has had a successful Ferruginous Hawk nest on each of my four visits in recent years.

Edgar also lived for a time on 15-13-25w3, near Wapashoe school and post office, about 8 miles closer to Maple Creek, a mile west of the Atkinson home and two miles west of the Gold farm.

Giving his address variously as ''Bigstick Lake'' or ''Sagathun Post Office,'' Baynton banded exactly 100 individuals of 16 species, including 21 Northern Pintails, 8 Northern Shovelers, 6 Green-winged Teal, 9 Ferruginous Hawks, 18 Barn Swallows, 14 Sprague's Pipits, 3 Upland Sandpipers and 2 Marbled Godwits, between 1928 and 1934. He also

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*Number 18 in a series of biographies of Saskatchewan bird banders.

John Gold — bird bander.

banded two Loggerhead Shrikes on a return visit to Maple Creek in 1937.

In 1934 he moved briefly to Medstead, Saskatchewan, and then to Belbutte, where he lived until 1955. He was a member of the Saskatchewan Sheep-Breeder's Association and a staunch supporter of the CCF. Between 1935 and 1939, at Belbutte and Rabbit Lake, he banded 63 birds of 8 species, including 20 Brewer's Blackbirds, 18 House Wrens, 15 American Robins, and 6 Killdeers.

The bird banding files show that Baynton had no recoveries from any of the 172 birds during his ten years of casual banding. Since recovery rates were generally much higher when public curiosity was greater and in the days when many farmers still thought that "the only good hawk is a dead hawk," it is surprising that he did not have one or two recoveries from the ducks and the Ferruginous Hawks he banded.

Baynton interested two neighbours, Atkinson and Gold, in becoming banders as well.

Edward A. Atkinson, born in Ireland in 1885 and a Boer War veteran officer, settled north of Maple Creek much later than Baynton, ranching in partnership with E.G. Waller near Wapashoe Post Office on section 14-13-25w3. They raised purebred Hereford cattle and Percheron horses. An avid sportsman, Atkinson trained bird dogs for hunters all over North America. Between 1927 and 1932, he banded 94 individuals of 20 species, including 37 banded in 1932, his best year. His two top species were Killdeer with 23, and American Robin with 15 individuals banded. It is strange that from 12 Mallards, 2 American Bitterns, 4 Eared Grebes and 4 American Coots, there were no recoveries. A lifelong bachelor, he sold his home place in 1947 to M.A. English and his summer pasture on sections 5, 7 and 8 in township 14, range 24, to the Gold brothers. After a prolonged visit to his native Ireland, he died at Maple Creek in 1951.

John A. Gold, was the son of John L. Gold, who had the office of the Rural Municipality of Bigstick #141 in his ranch home, on the southwest quarter of 28-13-25w3, 14 miles north and 4 miles east of Maple Creek. One day Edgar Baynton, when visiting the municipal office to pay his taxes, noticed young John's egg collection and showed John the proper equipment for blowing out the contents of a bird's egg. Although John was not yet of age, having been born on 26 November 1917, with Baynton's encouragement he was able to obtain banding permit #356. He banded 62 individuals of 10 species in 1934 and 1935, including 18 Snow Buntings and 6 American Crows. Included in the total were two Killdeers banded in 1937. A crow banded 19 miles north of Maple Creek on 23 June 1935 was shot at Radville, Saskatchewan, on 4 May 1936. Gold and his brothers also operated the General Motors dealership in Piapot from 1947 to 1957. On selling their land in 1958, John built and operated the

Wheel-Inn Service, Cafe and Campsite on Highway #1 at Piapot until 1982 when he retired into Maple Creek, where he resides in summer and winters in Phoenix, Arizona.

Baynton, Atkinson and Gold submitted carefully prepared and legible schedules. Their identifications seem correct except for one "Buff-breasted Sandpiper" banded by Baynton on 18 July 1930 and three "Crested Flycatcher" fledglings banded on 2 July 1929 by Atkinson.

While Western Kingbirds are the expected yellow-breasted species of flycatcher in that area, it would be strange if Atkinson had made a misidentification in 1929 after banding and correctly identifying Western Kingbirds only two years earlier.

In 1955 Baynton retired to Canyon, British Columbia, where he continued sheep breeding on a smaller scale. He died in the Creston Valley Hospital on 17 June 1969 at the age of 93 years.

Acknowledgements

I wish to thank Sylvia Baynton of Saskatoon for information concerning Edgar's move to British Columbia in the mid-1950s and Sophie Baynton (no relation), who kindly found and photocopied the 19 June 1969 issue of the Creston Valley Advance containing Edgar Baynton's obituary. John A. Gold provided information concerning himself and Edward Atkinson.

ALBERTA BIRDS NOW AVAILABLE

Alberta Birds, 1971-1980 Volume 1, Non-passerines is now available. This 240 page book, the first of a two volume set, was written by Harold Pinel, Wayne Smith and Cleve Wershler, and is published by the Provincial Museum of Alberta. This work is a summarization and analysis of the records of non-passerine birds in Alberta from 1971 to 1980. It updates the previously existing works on Alberta's avifauna. Included in this book is information regarding seasonal status, migration patterns, breeding biology and interesting highlights.

To obtain a copy, send cheque or money order payable to the Calgary Field Naturalists' Society, c/o 1017 – 19 Avenue, NW., Calgary, Alberta, T2M 0Z8. The total price of this book is $15.50 (Cdn), which includes shipping, handling and G.S.T. on postage.

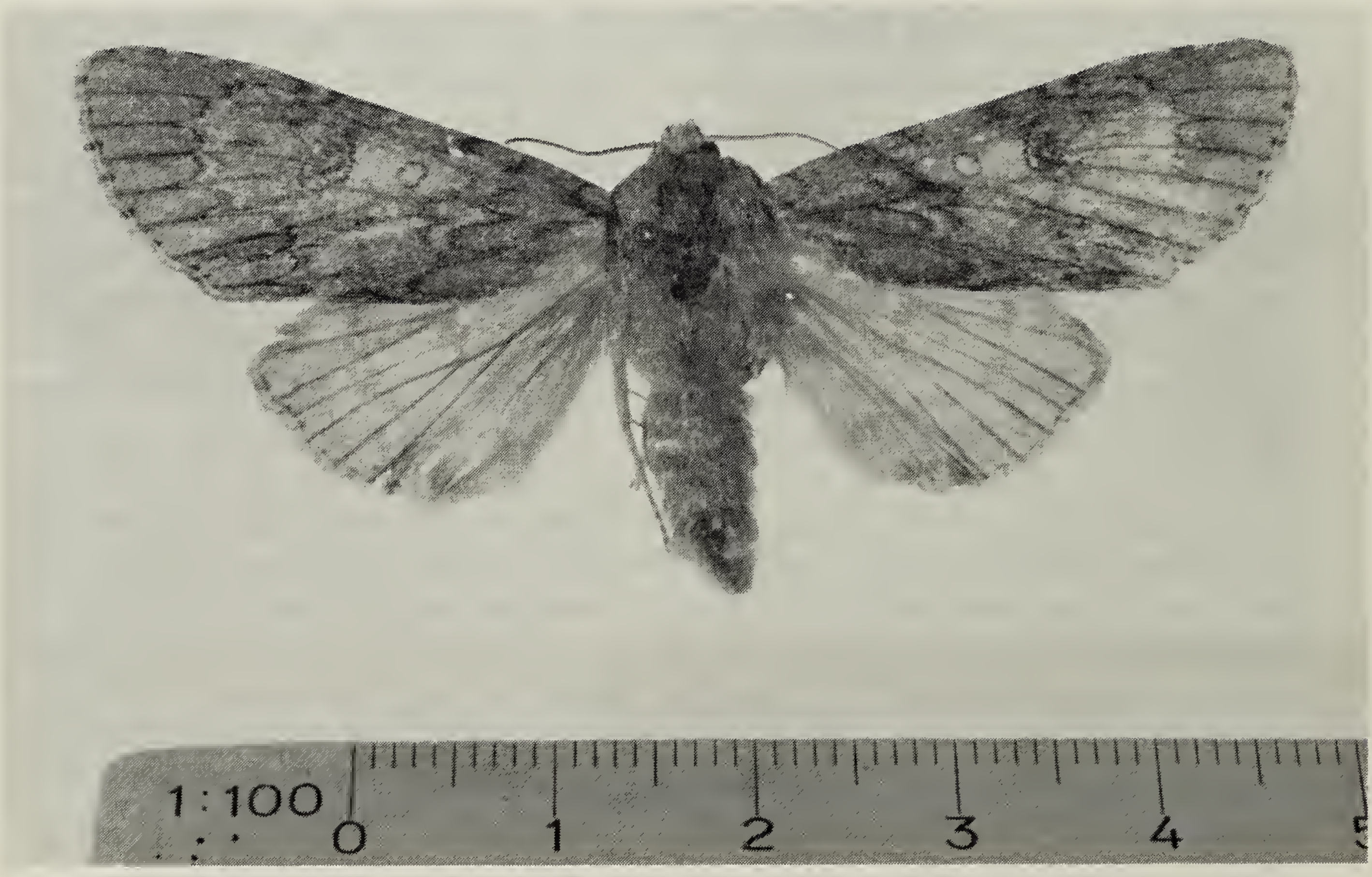
CHECK-LIST OF THE MOTHS OF SASKATCHEWAN PART 8: DAGGER-MOTHS (*ACRONICTINAE*) AND FORESTERS (*AGARISTINAE*)

RONALD R. HOOPER, Saskatchewan Museum of Natural History, 2340 Albert Street, Regina, Saskatchewan. S4P 3V7

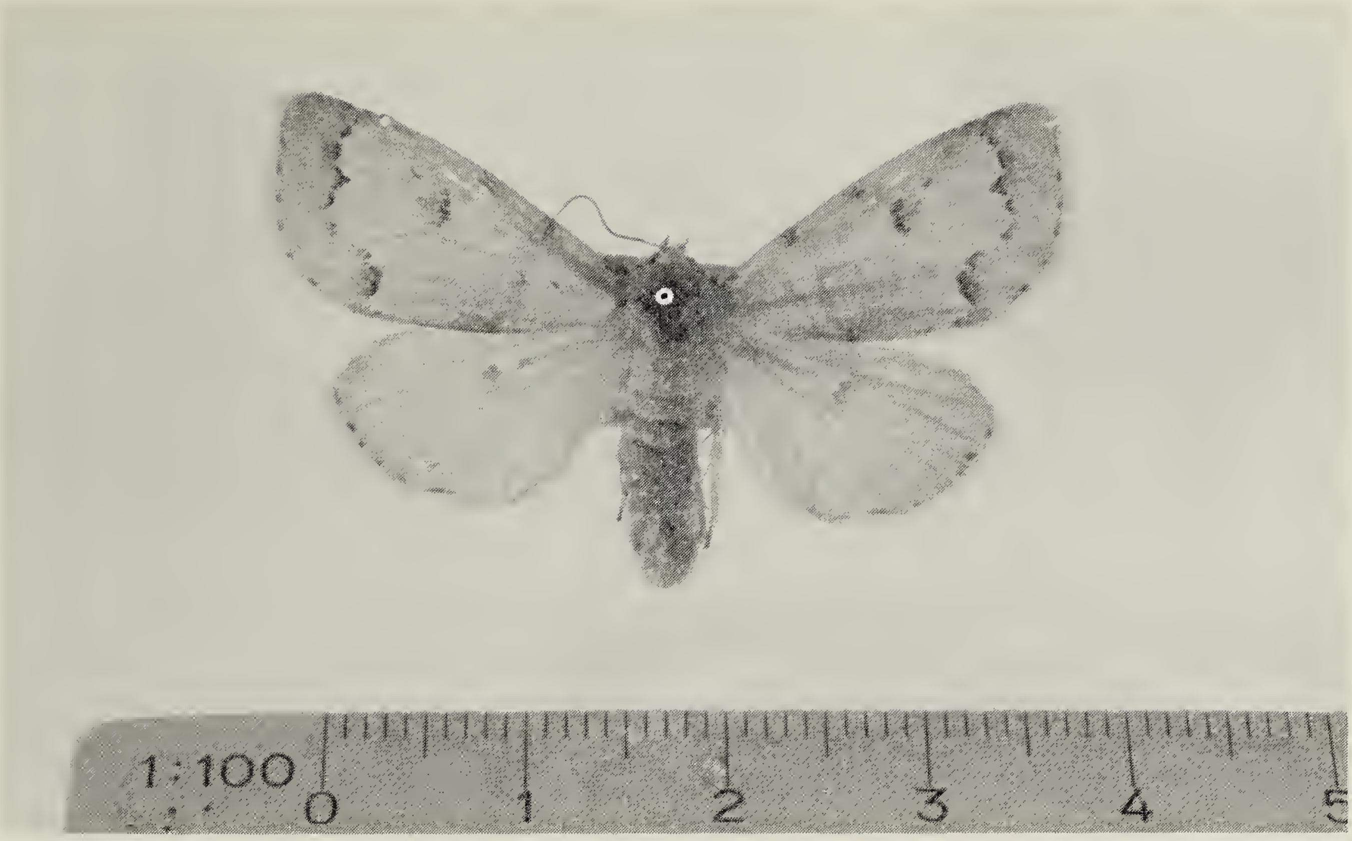
Abbreviations: s = south, n = north, w = west, e = east, CNC = the only known Saskatchewan records of the species are in the Canadian National Collection in Ottawa. (Unless otherwise indicated all the species are represented in the collection of the Saskatchewan Museum of Natural History, Regina.)

Dagger-Moths (*Acronictinae*)

These are medium-sized to larger Owlet Moths (up to 55 mm in wing expanse). Near the lower corner of the fore-wing many species have a dagger-like black line. Many species also have a black basal streak on the fore-wing. Some species have the sub-marginal line of the fore-wing resembling the side profile of a human face. In such cases the reniform spot resembles an ear. Dagger-Moths usually live in wooded areas where they lay their eggs on various trees and shrubs. The pattern and colour on the fore-wings is constructed so as to cause the moth to blend amazingly well with the bark of the tree of the food plant. Because of this, the palest of our species have birch and aspen as their preferred food plants.



American Dagger-Moth *Ron Hooper*



Unmarked Dagger-Moth *Ron Hooper*

Dagger-Moths usually come more freely to sugar bait than they do to lights.

American Dagger-Moth – *Acronicta americana* (Harr.) – s Sask. n to Erwood and Nipawin.

Fingered Dagger-Moth – *Acronicta dactylina* Grt. – s Sask. n to La Ronge.

Large Gray Dagger-Moth – *Acronicta hesperida* Sm. – Kamsack and Earl Grey.

Cottonwood Dagger-Moth – *Acronicta lepusculina* Gn. – s Sask. n to Nipawin Prov. Park.

Vulpina Dagger-Moth – *Acronicta vulpina* (Grt.) – s Sask. n to Cumberland House and Meadow Lake Prov. Park.

Unmarked Dagger-Moth – *Acronicta innotata* Gn. – n Sask. s to Moose Mountain and Fort Qu'Appelle.

Radcliffe's Dagger-Moth – *Acronicta radcliffei* (Harv.) – Cypress Hills, Fort Qu'Appelle, Hudson Bay and Nipawin.

Gray Dagger-Moth – *Acronicta grisea* Wlk. – s Sask. n to Sturgeon Landing, Otter Rapids and Porter Lake.

Gentle Dagger-Moth – *Acronicta mansueta* Sm. – Buffalo Pound Prov. Park, and Rosefield (se of Val Marie).

Quadrate Dagger-Moth – *Acronicta quadrata* Grt. – s Sask. n to Fort Qu'Appelle and Battlefords Prov. Park.

Forked Dagger-Moth – *Acronicta furcifera* Gn. – s Sask. n to Love.

Nondescript Dagger-Moth – *Acronicta spinigera* Gn. – Roche Percee and Big Muddy Lake.

Ochre Dagger-Moth – *Acronicta morula* G. & R. – Glen Ewen, Roche Percee and Trossachs.

Interrupted Dagger-Moth – *Acronicta interrupta* Gn. – Maryfield, Roche Percee, Moose Jaw, and Rosefield (se of Val Marie).

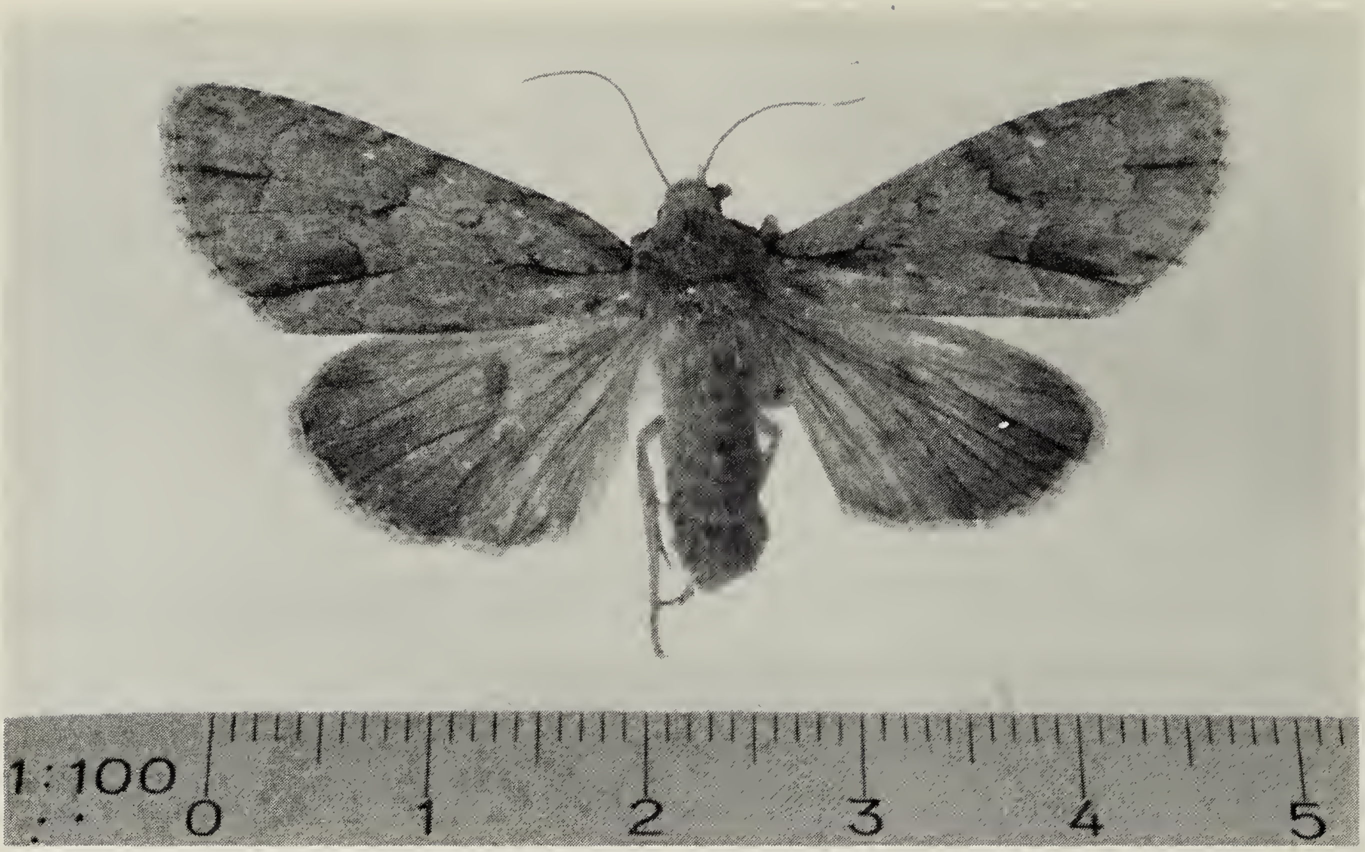
Lobelia Dagger-Moth – *Acronicta lobeliae* Gn. – Tantallon.

Chain-dotted Dagger-Moth – *Acronicta fragilis* (Gn.) – Central Sask. s to Moose Mountain Park, and Pike Lake; n to Foster Lake; also in Cypress Hills.

? – *Acronicta* sp. (near *A. haesitata* (Grt.)) – Tantallon

Unclear Dagger-Moth – *Acronicta inclara* Sm. – Tantallon.

Powdered Dagger-Moth – *Acronicta impleta* Wlk. – Central Sask. s to Moose



Ochre Dagger-Moth *Ron Hooper*

Mountain Prov. Park, Fort Qu'Appelle, and Douglas Prov. Park; n to Weekes, and Meadow Lake Prov. Park. Also in Cypress Hills.

Sperata Dagger-Moth – *Acronicta sperata speratina* Sm. – s Sask. n to Hudson Bay and Prince Albert National Park.

Impressa Dagger-Moth – *Acronicta impressa* Wlk. – s Sask. n to Aylsham.

Distans Dagger-Moth – *Acronicta distans* (Grt.) – s Sask. n to Somme.

Smeared Dagger-Moth – *Acronicta oblinita* (J.E. Smith) – s Sask. n to Bertwell and Prince Albert.

Pointed Dagger-Moth – *Acronicta lanceolaria* (Grt.) – Swift Current (Department of Agriculture, Saskatoon); Lumsden (CNC).

Henry's Marsh Moth – *Simyra henrici* (Grt.) – s Sask. n to Love.

Gem Marvel – *Agriopodes geminata* (Sm.) – Cumberland House and Pike Lake.

Gray Marvel – *Agriopodes teratophora* (H.-S.) – s Sask. n to Tantallon, and Pike Lake.

Harris' Three-spot – *Harrisimemna trisignata* (Wlk.) – Somme and Buffalo Pound Prov. Park.

Expected Species

Funerary Dagger-Moth – *Acronicta funeralis* G. & R. – Eastern Canada w to Manitoba and British Columbia.

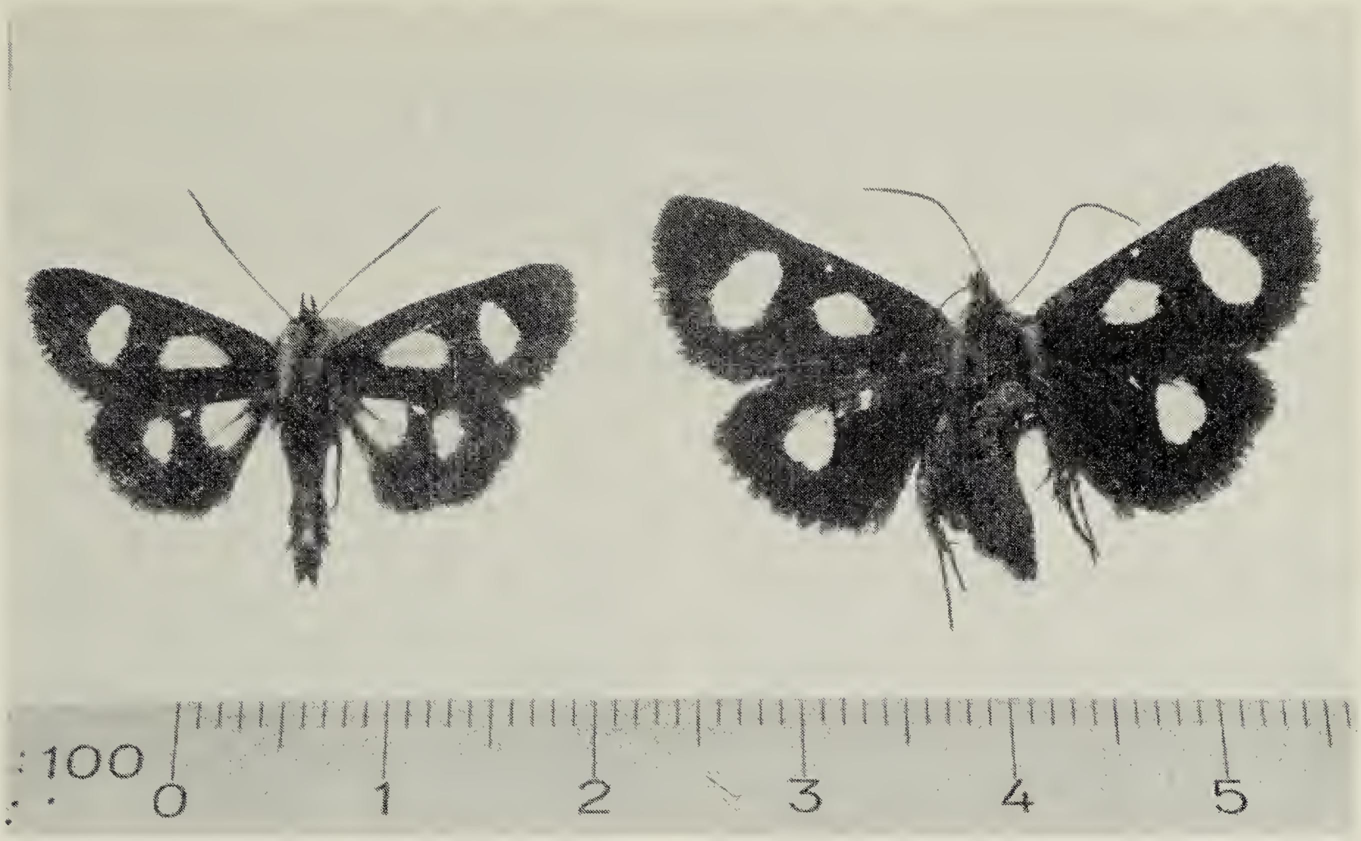
Night-wandering Dagger-Moth – *Acronicta noctivaga* Grt. – Eastern Canada w to Manitoba and Oregon.

Long-winged Dagger-Moth – *Acronicta longa* Gn. – Eastern Canada w to Manitoba and the Rocky Mountains.

Lupine Dagger-Moth – *Merolonche lupini* (Grt.) – British Columbia e to Malta, Montana.

The Foresters (*Agaristinae*)

The foresters are black moths with oblong cream-coloured or white patches on the wings. Our species have bright orange hair on the tibiae of the fore and middle legs. They fly on warm, sunny days along with the butterflies. Our species have clubbed antennae; however, the clubs are longer and more slender than those of butterflies. The caterpillars are usually brightly marked with black and orange and feed on plants of the



Langton's Forester *Ron Hooper*

grape and evening primrose families.

Eight-spotted Forester – *Alypia octomaculata* (F.) – Regina and Eston.

Langton's Forester – *Alypia langtoni* Couper – s Sask. n to Milliken Lake (s of Uranium City).

Northern Forester – *Androloma maccullochii* (Kby.) – n Sask. s to Greenbush Campsite (w of Hudson Bay), La Ronge, and Clearwater River (n of La Loche).

Expected Species

Pearly Wood Nymph – *Eudryas unio* (Hbn.) – Eastern Canada w to Transcona, Manitoba, and Utah.

1. COOK, WILLIAM E. 1931. An ecologically annotated list of the *Phalaenidae* of Montana (*Lepid.*). *Canadian Entomologist* 63:1-9.

2. MITCHELL, ROBERT T. and HERBERT S. ZIM. 1964. Butterflies and moths, a guide to the more common American species. Golden Nature Guide.

* * *

Whooping Crane distribution as given in the 1895 *Checklist of North American Birds* (American Ornithologists' Union, New York): "Interior of North America, from the Fur Countries to Florida, Texas, and Mexico, and from Ohio to Colorado. Formerly the Atlantic coast, at least casually, to New England."

A NEW UNDERWING MOTH FOR THE PRAIRIE PROVINCES

RONALD R. HOOPER, Saskatchewan Museum of Natural History, 2340 Albert Street, Regina, Saskatchewan. S4P 3V7

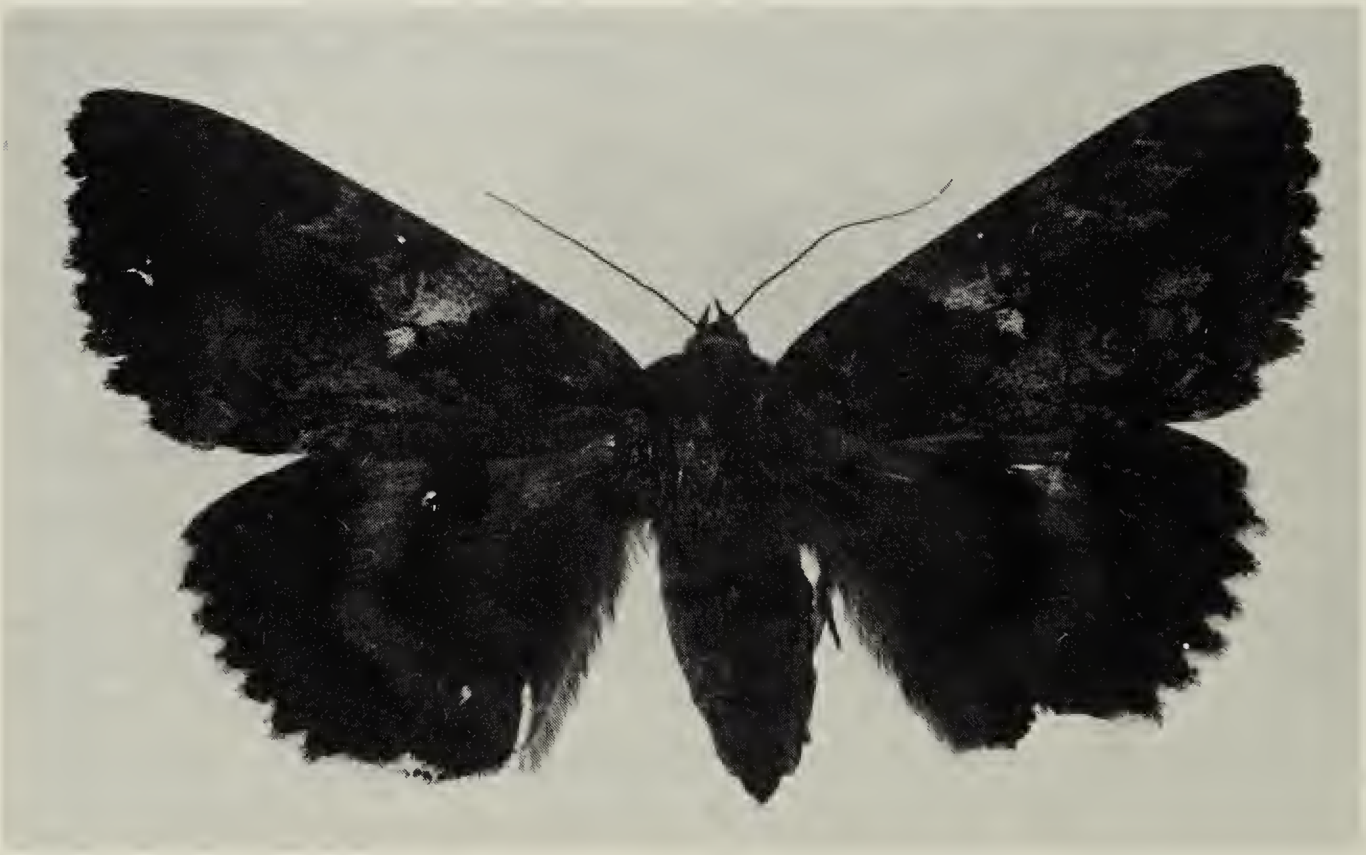
On 11 September 1990, one mile west of Fort Qu'Appelle, I had just observed a Whooping Crane flying high in the sky, near some Sandhill Cranes. I went for the binoculars to get a better look. When I returned I couldn't find the crane, but I found another rarity.

On the shingled wall where the light had been shining the previous night, I saw a ''different'' looking underwing moth. It turned out to be the Western Underwing (*Catocala aholibah* – Strecker). I had a photograph of it identified by Dr. Lawrence Gall of the Peabody Museum of Natural History, New Haven, Connecticut.

The food plant of the Western Underwing is Garry Oak which occurs in Canada only in southwestern British Columbia and Vancouver Island. It ranges southeastward to Colorado. The range of the Western Underwing is approximately that of its food plant. It has, however, been taken northeastward to western South Dakota, western North Dakota, and now Fort Qu'Appelle, Saskatchewan. It is assumed that the specimens taken outside the range of the known food plant are strays.

The rosy red hind wings are edged with a broad black outer border which appears to have a saw-toothed outer edge. This is caused by the row of small white triangles along this border. No other species of Underwing Moth in North America shows this feature so clearly.

This brings the present list of Underwing moths for Saskatchewan to 17 species.



Western Underwing *Lawrence Melit*

EUROPEAN SKIPPER IN SASKATCHEWAN

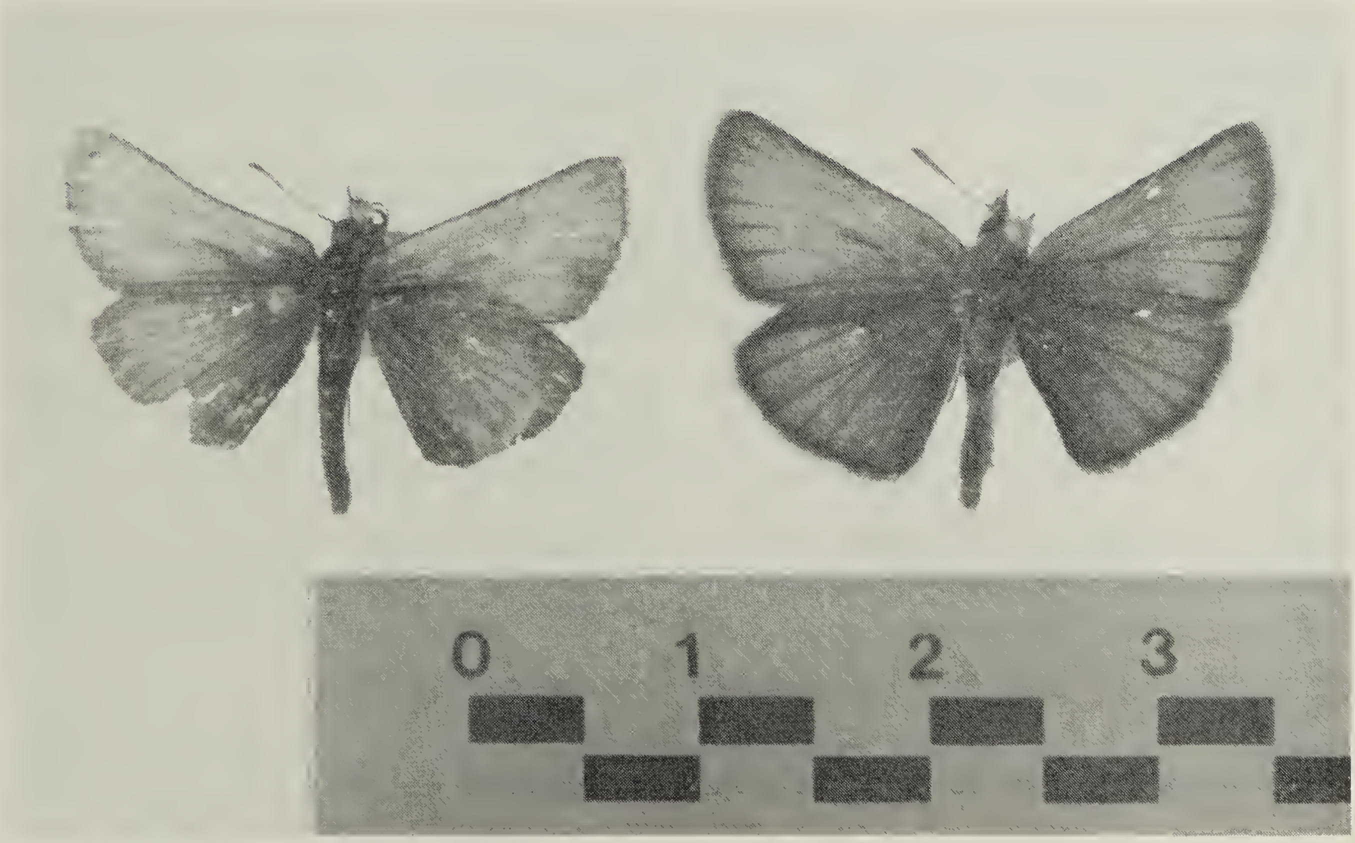
RONALD R. HOOPER, Saskatchewan Museum of Natural History, 2340 Albert Street, Regina, Saskatchewan. S4P 3V7

On 18 July 1984, I collected some butterflies along a roadside ditch north of Assiniboia, Saskatchewan. When they were mounted recently, I discovered that among them was a worn specimen of the European Skipper (*Thymelicus lineola* (Ochs.)). It is apparently the first record for the province.

The European Skipper was accidentally introduced into North America near London, Ontario, in 1910. From there it spread into Michigan and Ohio by 1927; New York by 1948; southern Ontario by 1950; New Brunswick and Illinois by 1947; New Jersey by 1958; central Ontario and Wisconsin by 1960; Winnipeg, Manitoba, by 1972; Iowa by 1975; Newfoundland and Minnesota by 1976. Then it was taken in eastern North Dakota and Saskatchewan in 1984 and in Colorado in 1985.

Another introduction accidentally occurred in British Columbia for it was found near Terrace in 1960. By 1981, it had spread to Revelstoke, and by 1987 to Edmonton, Alberta.

The European Skipper prefers timothy grass for a food plant. It has become a pest in Quebec in timothy fields. Timothy is not an important hay crop in Saskatchewan, and is usually grown as a mixture with other grasses, so it may not become a serious economic pest here.



European Skipper (Saskatchewan: left/New Jersey: right) *Ron Hooper*

FIRST DOCUMENTED NESTING FOR THE NASHVILLE WARBLER IN SASKATCHEWAN

DONALD F. HOOPER, Box 40, Somme, Saskatchewan. S0E 1N0

While my wife and I were walking through a small black spruce bog near the Greenbush River, 20 km west of Hudson Bay on 5 July 1990, a warbler flew up at my feet. I looked for some time before I spotted the nest containing five eggs – white, speckled and blotched with chestnut red, and well concealed in a hollow in sphagnum moss on the side of a hummock. Les Baker and I went back a few days later and the bird was so shy that I had to flush it from the nest several times before I could get a good look at it. The head was bluish-grey with a white eye ring and a yellow throat. A colour picture taken by Les Baker of the bird on the nest shows that it has a small reddish cap on the crown. This is none other than the Nashville Warbler and it is the first documented nest for this species in Saskatchewan.[2]

The area the Nashville Warbler nested is a good place for birds and Les and I had searched out its various habitats during the last week of June. To the west of the black spruce bog is a bluff of white spruce on the river bank. A Solitary Vireo had a nest with four well-feathered young on a low horizontal spruce branch. A Blackburnian Warbler was seen flitting among the spruce, carrying insects for its young; a pair of Yellow-rumped Warblers scolded nearby. From high in the spruce was heard the occasional "zee zee zee zoo zee" of a Black-throated Green Warbler.

A back channel from the river runs along the north edge of the spruce creating a shaded hollow of water which is a handy retreat for the birds to drink and bathe. In the brushy edges of the channel two Winter Wrens were singing. They probably had their nests along the bank.

Further to the north is an aspen woods where the patriotic White-throated Sparrow's sweet "Can-a-da-Can-a-da" song was heard, and on the edge of the woods a Red-eyed Vireo sat on its nest, woven onto the fork of a branch, on a speckled alder. The Greenbush River looped and curved through thick willows in the bottom of the valley, where Common Yellowthroats, Northern Waterthrushes and Yellow Warblers were singing near the water.

Back from the river are steep banks with scattered aspens and as I ascended on the path a Connecticut Warbler scolded me with great frenzy, as it warned me that I was intruding on its territory. The nest would have to be on the ground nearby, but where?

South of the bog where the Nashville Warbler nested is an opening with scattered shrubbery where Chestnut-sided and Mourning Warblers were scolding. In the aspens further south could be heard the cry of young birds which came from a Yellow-bellied Sapsucker's nest, as they greedily called out between feedings. Redstarts flitted through the under-brush and in a thick grove of young spruce in a sunny opening a male Magnolia Warbler sang with its yellow breast flashing in the sunlight.

Off to the east is an extensive stretch of black spruce where a family of Great Horned Owls lived. The young birds were almost as large as the adults but with no ear tufts yet, only with comical looking fluffy heads. They peered at us with large yellow eyes. Among the thick black spruce were some Boreal Chickadees and Golden-crowned Kinglets which prefer cool moist woods.

The birds above are only some of the species seen or heard within 500 m of the Nashville Warbler's nest. The unveiling of the warbler's secret was the highlight of my summer birding activities.

Other breeding records for the Nashville Warbler in Saskatchewan are of one bird scolding at Big Piwei Lake south of Carragana that was seen by Les Baker and I on 12 July 1989, and a family group was seen in Greenwater Provincial Park by Curtis Pollock on 15 July 1985.[2] This species is also reported breeding at Kazan Lake, Montreal River and Prince Albert National Park.[1]

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PROCEEDINGS OF SECOND ENDANGERED SPECIES AND PRAIRIE CONSERVATION WORKSHOP PUBLISHED

One-third of the threatened and endangered birds and mammals in Canada occur on the prairies. These proceedings document the three-day workshop on Endangered Species and Prairie Conservation that was held at the Saskatchewan Museum of Natural History, Regina, in January 1989. They include 99 papers on endangered species and habitats in the three prairie provinces. Articles discuss the state of the Prairie Conservation Action Plan and the interactions between agriculture and wildlife.

Species that are discussed include Trumpeter Swans, Ferruginous Hawks, Peregrine Falcons, Burrowing Owls, Loggerhead Shrikes, Swift Fox, and Plains Bison.Agricultural topics include climate changes, pesticides, disease and wildlife economics. Eight papers discuss prairie shorebird conservation. Other topics include plant conservation, research, education, endangered species legislation, land management, grassland birds, and implementing the Prairie Conservation Action Plan.

The proceedings were published in Occasional Paper No. 15, Provincial Museum of Alberta and may be obtained from Blue Jay Bookshop, Sub P.O. 8, 1210 7th Avenue North, Saskatoon, SK, S7K 2W2. For bulk orders (five or more), contact Saskatchewan Natural History Society, Box 4348, Regina, SK, S4P 3W6.

NORTHERN MOCKINGBIRD AND SWAMP SPARROW OVERWINTER IN CALGARY

ROSS D. DICKSON, #5-2303 22 Street Northwest, Calgary, Alberta. T2M 3W5

Throughout the winter of 1990-91, Calgary birdwatchers had an opportunity to monitor the behaviour of two species rarely reported in the city.

During a long cold spell in late December 1990, an adult Northern Mockingbird was first reported feeding on peanuts at a bird feeding station in the Glamorgan subdivision. The daily mean temperature for the period from 18 December to 10 January was -19°C with daily minimums colder than -30°C on six days.[2] For the remainder of the winter, temperatures were generally above the long-term average with near normal snowfall.

Northern Mockingbirds are well-known for aggressive territorial defence of winter feeding areas, especially against other fruit-eating birds.[3] On sunny days the Calgary bird often sat in a lilac shrub beside the south-facing side of a house, loudly calling ''chick-chick-chick,'' which is a form of territorial behaviour.[7] The mockingbird became relatively inactive when temperatures dropped, perching with fluffed up feathers. Only seed-eating birds such as Pine Grosbeak and Common Redpoll were seen in the area, despite a record high number of Bohemian Waxwings in the city. The territory, which encompassed about five house lots and two feeding locations, also featured a few fruit-bearing shrubs and Mountain ash (*Sorbus* spp.). Orientation of the houses and trees reduced the effects of northerly and westerly winds.

A common winter problem of the Mimidae family is cold feet and legs. On cold days, this mockingbird tucked its left leg into its belly feathers whenever it perched. During the 1988-89 winter, a Brown Thrasher with cold feet – it walked with difficulty – learned to sit in the radiated heat from a lightbulb within a large bird feeder near Turner Valley, Alberta (Tom Webb, pers. comm.).

The winter range of the Northern Mockingbird is the southern U.S. and Mexico.[5] However, with increasing frequency, the species is found on some Christmas Bird Counts in eastern Canada and one was present until late January in Calgary in 1958.[4,6]

A reclusive Swamp Sparrow which survived along a riverbank of the Bow River in northwest Calgary was the first Alberta wintering record. The bird showed strong site fidelity to a brushy thicket approximately 60 m x 5 m in area, bordered inland by a chainlink fence around a condominium complex.

A nearby homeowner provided a commercial bird food mixture, but the bird had not been seen to eat the offering until a late February snowfall buried its foraging area. It had spent a considerable amount of its time scratching among leaf trash left bare after a January chinook (Russ Dickson, pers. comm.). This species is considered to be the most insectivorous of the *Melospiza* sparrows, with a typical winter diet consisting more of animal matter than seeds.[1]

Northern Mockingbird in Calgary *Douglas Collister*

Hibernating insect larvae and eggs were likely typical winter fare, although seeds were possibly also available in the thicket composed of Balsam Poplar (*Populus balsamifera*), Red-osier Dogwood (*Cornus stolonifera*), Silverberry (*Elaeagnus commutata*), Canada Thistle (*Cirsium arvense*) and some grass.

The sparrow appeared to roost overnight along the river cutbank where a tangle of overhanging roots and fallen tree branches had formed a series of tiny caves about 30 cm above the ice.

Three Swamp Sparrows, believed to be on migration, were recorded in the first week of October at the Inglewood Bird Sanctuary which is downstream from this site. This bird was first seen on 17 December 1990, on the Christmas Bird Count. The species is recorded on some Christmas Bird Counts in the Atlantic Provinces and at Point Pelee, but is seen much more frequently in swampy thickets in the southeastern United States.[4,5]

The choice of Calgary as a wintering location was unexpected in that the city is somewhat removed from the closest summer range of either bird. Northern Mockingbirds are considered to be extremely rare breeders in the southeastern part of Alberta. Swamp sparrows are locally uncommon breeders in the Rocky Mountain foothills. The availability of food combined with a relatively mild micro-climate appear to be the two main factors in the survival of these two birds.

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TRUMPETER SWANS IN EASTERN SASKATCHEWAN

DONALD F. HOOPER, Box 40, Somme, Saskatchewan. S0E 1N0

In early November 1987, I was getting a haircut in Porcupine Plain and talking to Frank, the barber, about doing a study on the migratory waterfowl at Marean Lake in Greenwater Provincial Park. The usual number of old timers were in the barber shop visiting and listening to whatever conversation came up. When I mentioned the birds on Marean Lake, LeRoy LeGrande spoke up. (Roy, as he is usually called, is a tall gentleman with a crooked stemmed pipe in the corner of his mouth, who can tell you about many exciting adventures that he experienced while freighting in the north.)

"Did you see the Trumpeter Swans on Marean Lake?" he said.

"Trumpeter Swans?" I asked.

Roy replied, "I canoe on the lake in August and have seen two to four birds both this summer and last."

"Roy," I said, "Swans are not supposed to be here in the summer. The Tundra Swan nests in the Arctic and Trumpeters are western birds. The large white birds that you are seeing must be pelicans."

Roy became quite disturbed and, with eyes snapping, said emphatically, "I know a swan when I see one."

I immediately dropped the subject, but in 1989 I apologized to Roy when I found that he was right, for on 29 June I saw a pair of swans on Marean Lake and they were definitely Trumpeters. Upon viewing them at close range with a 32x spotting scope I could see that there was no yellow on the bills between the nostrils and the eyes (this is also missing on some Tundras) and the longer straight bills covered a considerable portion of the sides of their faces; this with the flattened crowns on their heads gave them much longer and narrower white foreheads than those of Tundra Swans.

On 28 May 1989, Michael Crawford photographed a pair of Trumpeter Swans just south of Greenwater Provincial Park. The pictures were sent to Paul James and Bob Kreba of the Saskatchewan Museum of Natural History in Regina and to Henri Ouellet of the National Museum in Ottawa. It was confirmed that they had been properly identified. A pair of swans that I photographed on Greenwater Lake, 8 May 1990, were also verified as Trumpeters from a picture that I sent to James and Kreba.

The Trumpeter Swan was once common in western and central North America and formerly nested in Canada at least as far east as Norway House, Manitoba.[2] During the 1800s they were nearly exterminated by the commercial plumage trade, hunting and habitat destruction. Between 1823 and 1880, about 108,000 swan skins were sold by the Hudson's Bay Company in London, and, for the oologist, Trumpeter eggs sold for a higher price than those of Whooping Cranes. It seemed by the early 1900s that the Trumpeter Swan was doomed to extinction for it had disappeared from much of its former breeding range.[3]

When protection was legislated for the non-migrating flock in Yellowstone, Wyoming, and Red Rock Lakes, Montana, it was thought that they included most of the world's Trumpeter Swans. However, in 1954, it was discovered that about 3,000 birds that were formerly thought to be

Trumpeter Swans at Greenwater Lake *Donald F. Hooper*

Tundra Swans nested in southern Alaska. Upon finding the Alaska flock the Trumpeter was taken off the endangered list.[3]

With the protection of the Tri-state flock in Wyoming, Montana, and Idaho,[3] and a closed hunting season on both species of native swans which became effective in 1918,[10] the Trumpeter Swan has gradually made a comeback over part of its former range. They nest in Canada in the Cypress Hills of Saskatchewan,[1,7,9] at Grand Prairie[3] and Elk Island National Park (introduced),[4] Alberta, Toobally Lakes in British Columbia and Yukon,[3] and Nahanni in the Northwest Territories.[4] Some birds were released by the Delta Research Station in Manitoba in 1971, but it is not certain whether they have reproduced in this area.[6] There are successfully introduced flocks in the United States in Oregon, Nevada, South Dakota, and Minnesota.[3]

Trumpeter Swans were reported nesting at Manning, Alberta, in 1986, and there are confirmed sightings for Lac des Isles, Saskatchewan, in June 1988, and Lynn Lake and Leaf Rapids in Manitoba, also in 1988.[6] In the light of this information one must not take it for granted that all swans seen in eastern Saskatchewan are Tundras. Swans seen between June 10 and August 31 should be checked to see if they are Trumpeters. An injured Tundra Swan can remain for the summer instead of going to the Arctic and there is the very unusual situation of a pair of Tundra Swans nesting in the parklands near North Battleford from 1973 to 1981.[8]

It was reported that 14 Trumpeter Swans were seen at Veillardville near Hudson Bay on 21 April 1987, but the pictures that were taken were sent to Paul James and Bob Kreba who identified them as Tundra Swans. There are unconfirmed reports of Trumpeter Swans from Mirond Lake, Pelican Narrows, Stony Rapids, Montreal Lake, Torch and Fond du Lac Rivers from 1985 to 1988.[6]

Probable records of Trumpeter Swans in the vicinity of Greenwater Provincial Park:

1. Several swans were seen by Mac Chimko and Louis Currey at Bjork Lake, 17 km north of the park, in July in the early 1970s.

2. One swan stayed at a small lake north of the park in June the early 1970s, and was seen by Joe Genaille.

3. Two to four were seen by LeRoy LeGrande at Marean Lake in August 1986 and 1987.

4. Pair of Trumpeters Swans was seen at Mystrey Lake just south of the park on 28 May 1989. One bird was heard to trumpet loudly and the identity was verified from pictures taken by Michael Crawford.

5. Pair of Trumpeter Swans seen at close range at Marean Lake by Donald Hooper on 27 June 1989. This pair was seen again on 29 June by Carl and Joyce Mohr.

6. Pair of swans seen occasionally in the summer of 1989 by Leona Seafoot at a small lake just north of the park.

7. Pair of Trumpeter Swans was seen on Greenwater Lake by Herman and Irma Doerksen and G. and P. Brozoski on 7 October 1989. The swans were observed at close range from canoes, and one was heard to trumpet loudly.

8. On 5 May 1990, a pair of Trumpeter Swans was seen on Greenwater Lake by Ronald Hooper. One was heard to trumpet loudly. On 8 May, they were seen again in the same locality by Donald Hooper and Les Baker. One bird trumpeted so loudly that it sounded like a horn on a truck. We later checked with a tape on bird songs and we both agreed that this could be none other than the call of the Trumpeter Swan. A picture was taken by Donald Hooper and identification was verified.

9. A pair of swans was seen on Greenwater Lake by John Woulfe in late May 1990.

10. One swan was seen at a farm dugout south of the park by Leonard Teale, in late June 1990.

11. Dave Harvey saw Trumpeter Swan on Marean Lake on 26 June 1990.

12. Pair of Trumpeter Swans was seen on a small marshy lake in the park by Donald Hooper and Rhys Beaulieu on 11 July 1990. The marsh was checked by canoe but there was no brood.

Probable records of Trumpeter Swans seen in other parts of Eastern Saskatchewan:

1. One Trumpeter Swan was photographed by Wayne Harris at Squaw Rapids on 24 December 1985.

2. Twelve swans were seen by Ronald Hooper on Echo Lake in the Qu'Appelle Valley on 28 October 1988. There were several grey young with them. One adult trumpeted loudly. An immature bird was seen by Ronald in the same locality on 26 November 1988. The pinkish bill was black at the base which shows that it was definitely a Trumpeter Swan.

3. One pair seen at Valeport by Bob Luterbach in early June 1990. One trumpeted loudly, definitely the call of the Trumpeter Swan.

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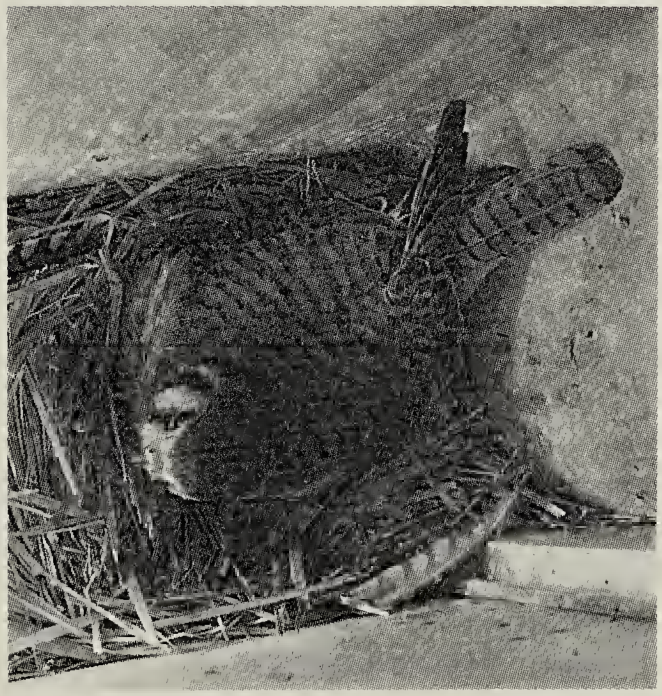
MALE KESTREL SHARES INCUBATING DUTIES

ROY EVERITT, Box 53, Newdale, Manitoba. R0J 1J0

Two American Kestrels have nested in the southwest corner of the loft of our barn for several years, gaining entry through a split corner board. Last fall I remodelled the nest site, lining the cavity with a light, reflective material. The top was made with a hole for a camera lens. The late afternoon sun illuminated the nest cavity quite well. With a long remote release on my camera, I was able to photograph the birds on the nest and not disturb them. I left my camera on the nest for two days (26-27 May 1990) and took several photographs each afternoon. On getting my slides back, I was surprised to see both male and female share duties in incubating. These slides were taken before the eggs hatched. I consulted Birds of Canada (W.E. Godfrey. 1986. National Museum of Canada, Ottawa. 595 pp.) and there was no mention of both sexes sharing incubation duties. Is this normal?

Ed. Note: Male kestrels do less incubating than females. Eslich, Dobbin and Whegl, 1988. The birder's handbook. Simon and Schuster, New York. 785 pp.



Male Kestrel *Roy Everitt*

Kestrel chicks *Roy Everitt*

LITTLE GULL IN SOUTHERN MANITOBA AND ADJACENT REGIONS, WITH NOTES ON JUVENILE PLUMAGE

PETER TAYLOR, Box 597, Pinawa, Manitoba. R0E 1L0

Sightings of Little Gulls at Pinawa and Patricia Beach in September 1988 prompted me to review inland records of this species in Manitoba. Records in neighbouring regions are also briefly reviewed for evidence of any regional trends.

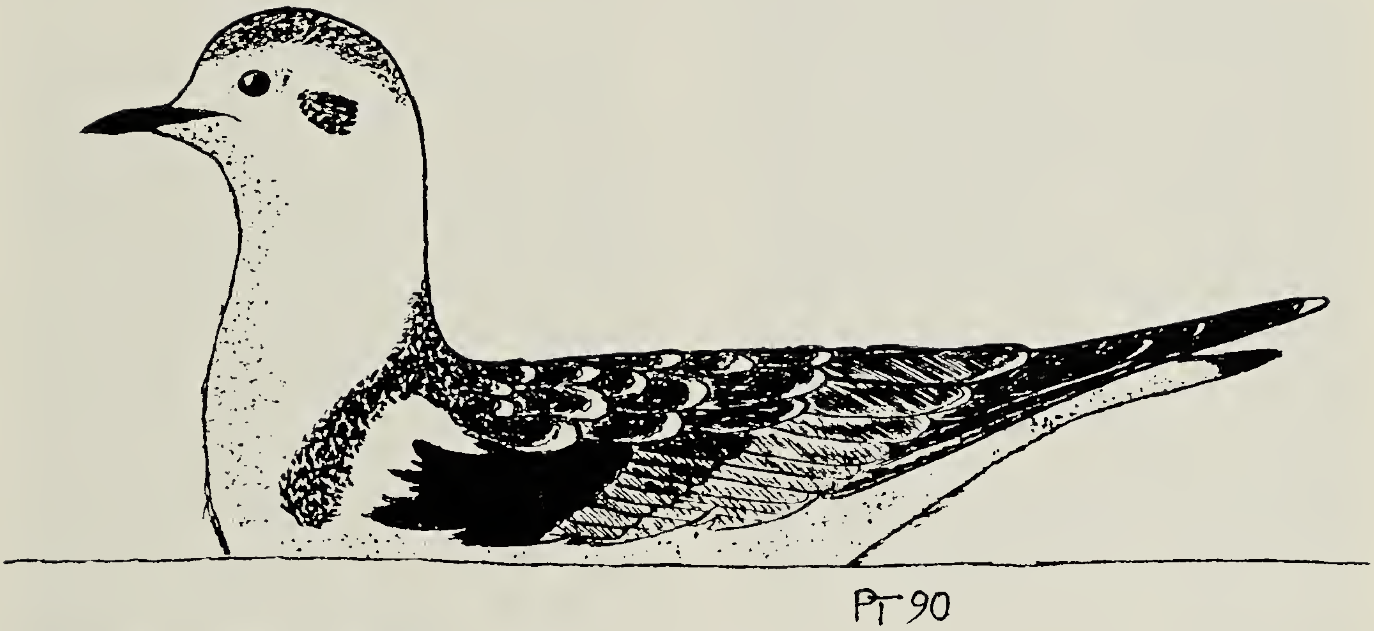
The Pinawa and Patricia Beach sightings involved first-year birds, the former still in juvenile plumage. This distinctive plumage, which is shown in the accompanying sketch, is not described in the most commonly used North American field guides, although it is discussed in more specialized identification books.[7,11,12] It is therefore described here in detail, with emphasis on comparisons with Bonaparte's Gull and Sabine's Gull. The terminology used for plumage description follows Grant.[7] The term "immature" is used when a distinction between juvenal and first-winter plumage has not been made.

Description of 1988 Sightings

At about 1400 h, 5 September 1988, I scanned a loose flock of about 40 Bonaparte's Gulls at the Pinawa sewage lagoons, and noticed a smaller, darker-backed gull among them. I identified it as a juvenile Little Gull, and this was confirmed at about 1630 h, by Gordon Grieef, George Holland, and Rudolf Koes. The gull was observed from as close as 35 m with 20x and 25x telescopes in fair light, and at somewhat longer ranges in excellent light. Koes obtained recognizable photographs. The gull was reported again the following day by Norman Cleveland, but could not be found after that. The Bonaparte's Gulls included both adults and immature, the latter in various stages of transition from juvenal to first-winter plumage. The following details distinguished the Little Gull from its companions.

The Little Gull was distinctly smaller than the Bonaparte's Gulls, its bill was shorter and dainty in comparison, and Koes commented on the small head and slender neck. The diffuse gray cap was darker and more extensive than on most immature Bonaparte's Gulls, but still separate from the eyes and blackish ear-spots. The forehead and lower napes were white. The lower hind-neck, mantle, scapulars and much of the folded wing were dark brownish gray; this dark tone extended to a small patch at the side of the upper breast, the remaining underparts being white. Narrow, pale feather margins, mainly on the scapulars, gave a distinctive scaly-backed appearance.

The Little Gull's markings and buoyant swimming posture gave the impression of a giant phalarope, almost as much as a small gull. The dark mantle and scapulars are the main features that distinguish juvenile Little Gulls from first-winter birds.[7,11,12] Juvenile Bonaparte's Gulls are also quite dark-



Little Gull – juvenile plumage *Peter Taylor*

mantled, but are less strikingly marked on the scapulars than Little Gulls, and those moulting into first-winter plumage usually have mottled rather than scaly mantle and scapulars, because of the more irregular pattern of individual feathers. They also sometimes have some diffuse gray tones on and about the lower hind-neck, but not very dark.

When the Little Gull was swimming, its primaries appeared mainly black above, with some white inner vanes visible when the wings were extended or incompletely folded. In flight, the black carpal bars [dark bands on the leading upper surface of the inner wing] on the dorsal surface of the inner wing were bolder, and the primaries showed much more black, than on an immature Bonaparte's Gull. The portions of the upper wing coverts distal to the carpal bars were medium gray. The secondaries were whitish, and lacked the dark trailing edge typical of immature Bonaparte's Gulls. The entire undersurfaces of the wings were white. The black terminal band in the square-cut tail was wider on the central than the outer rectrices, which gave the illusion of a forked tail when viewed against a dark background. In immature Bonaparte's Gulls, the terminal band on the slightly rounded tail is uniformly narrow.

Both afloat and in the air, the Little Gull resembles a juvenile Sabine's Gull. The most distinguishing feature on the water, other than size, is that the Sabine's Gull has continuous gray-brown feathering from the crown and ear-coverts down the neck to the mantle, with no intervening white area. Scaly markings on the back of a juvenile Sabine's Gull are less prominent than in a Little Gull. In flight, Sabine's Gull does not display a carpal bar, the entire inner forewing and the mantle being uniform in tone.

While swimming, the Pinawa Little Gull picked insects from the water surface much like the Bonaparte's Gulls, with somewhat livelier movements. It made a few brief flights, and on one occasion flew over the lagoon for about three minutes, often dropping momentarily to the water to pick up food. Both when swimming and flying, it seemed more buoyant than the Bonaparte's Gulls.

Less than two weeks after the Pinawa sighting, at about 1730 h on 17 September 1988, I saw a Little Gull at Patricia Beach, Lake Winnipeg, about 55 km west-northwest of Pinawa; there were no other observers. This bird was seen in good light, in company with Bonaparte's and Franklin's Gulls, but no closer than about 300 m. Fewer details could therefore be seen, compared with the Pinawa bird, but the gull was positively identified by its small size and characteristic wing pattern, as described above. This wing pattern drew attention at a great distance when the bird was first seen. It was clearly an immature bird, but the stage of moult from juvenal to first-winter plumage could not be determined. This bird was first seen flying across the lake, towards shore, and was later seen hawking insects with other gulls over a sheltered lagoon that adjoins the lake.

Discussion

The Little Gull's principal breeding range extends in patches from Siberia east to northern Europe.[7,11] A small breeding population exists in eastern North America, mainly in the Great Lakes region and along the coastal lowlands adjoining Hudson and James Bays in Ontario.[1,3,5,11,29] It has been suggested that the latter region is the prime nesting area of this species in North America.[3,29] This breeding region extends west to Churchill, Manitoba, where the Little Gull was first seen in 1970 and nesting was first observed in 1981.[19,21] A second nest was reported in 1987.[6] Little Gulls have been recorded in very low numbers at Churchill every year since 1979, except perhaps 1988 (Koes, pers. comm.). However, they remain extremely rare elsewhere in the Prairie Provinces and in much of North America.[1,4,5,15] The main North American wintering areas for this species are on the lower Great Lakes and along the Atlantic coast from Massachusetts to Virginia; winter movements in the Great Lakes region remain somewhat mysterious.[1,28]

The first inland report of a Little Gull in Manitoba involved a probable sighting of an immature bird in an unusual plumage at Lake Dauphin in late September 1970 by Martin K. McNicholl.[18] Remarkably, the next four records all came from Grand Rapids, a locality infrequently visited by birders. Calvin W. Cuthbert saw an immature bird there, 28 September 1977; his detailed description is on file at the Manitoba Museum of Man and Nature in Winnipeg.[24] An adult was seen and fully described by Alan Ryff and Harley Johnston at Grand Rapids, when they were en route to Churchill, 4 June 1983.[22] Finally, two sightings possibly involving the same bird were reported by John Christie (personal communication to Koes), 23 September 1986, and David Hatch, 15 October 1986.[10,13]

The first accepted Little Gull in Saskatchewan was a lone territorial male collected near Lake Athabasca, 28 June 1962.[20] The location of this now bears the official name Little Gull Lake. Three subsequent Saskatchewan records were summarized by Belcher.[2] A winter-plumage adult was seen by many observers, and photographed by Frank Switzer at Regina, 20-26 April 1973.[2,26] Bernie Gollop observed an immature Little Gull at Dundurn (Blackstrap Lake) 6 October 1973.[2,25] The most recently recorded Little Gull in Saskatchewan was apparently one seen by Wayne Harris at Deschambault Lake, 13 August 1975.[2]

Alberta's first recorded Little Gulls were an adult and an immature at

Namaka Lake, near Calgary, 22-29 September 1985. These were found by John Thompson and subsequently seen by several other observers, and photographed by Al Wiseley (Ross Dickson pers. comm.).[9] An immature bird was found at Beaverhill Lake, 14 October 1986, by Richard Klauke and Pat Marklevitz, and seen again two days later by Terry Thormin and Dave Nadeau (Terry Thormin pers. comm.).[10] Warren, Cam and Joy Finlay saw Alberta's fourth Little Gull, a winter-plumaged adult near Cooking Lake, while they were running a breeding bird survey, 28 May 1988 (Warren Finlay, pers. comm.).[27] In Minnesota, where the Little Gull was first reported in 1972, it is now a very rare but regular spring migrant (mainly near Duluth), and an accidental summer visitor and fall migrant.[8,14] A nesting attempt was recorded in Jackson County, southwest Minnesota in 1986.[14,23] Minnesota records include one immature Little Gull extremely close to Manitoba waters on Lake of the Woods, north of Warroad, 24 October 1984.[14,16] North Dakota's first Little Gull was an immature found by Ron E. Martin and Gordon B. Berkey, and photographed by David Lambeth at Garrison Dam, 27 November 1988; the species has apparently not yet been found in either South Dakota or Montana.[17] A search of Ontario Region seasonal reports in American Birds did not turn up any inland records of Little Gulls in northwestern Ontario.

Conclusions

In summary, Little Gull is an extremely rare and irregular visitor to Alberta, Saskatchewan and southern Manitoba during migration seasons. The species is a rare breeder at Churchill, Manitoba, and has been observed once in the breeding season in northern Saskatchewan. It has been reported more frequently in fall (ten reports between August and October) than in spring (three reports between April and early June in the southern Prairie Provinces); this is the opposite situation from that reported for Minnesota.[14] Immature (hatching-year) birds predominate in fall, whereas spring birds have all been adults, two of them still in winter plumage.

Little Gulls observed inland in Manitoba, or elsewhere in the Prairie Provinces, could have wandered from either the Hudson Bay or Great Lakes breeding populations. An origin outside North America is unlikely for a bird still in full juvenal plumage in Manitoba, but is possible for some of the birds discussed above. A further, tantalizing possibility is that other breeding areas remain to be found in or near the Prairie Provinces. Nero has suggested northern Saskatchewan as a possible nesting area.[20] Perhaps Grand Rapids, Manitoba, would also be a good place to search for breeding evidence.

Acknowledgements

I am grateful to Ross Dickson, Sam Droege, Warren Finlay, Rudolf Koes, Robert Nero, Spencer Sealy, and Terry Thormin for information. Koes, Nero and Sealy also made helpful comments on a draft of this article.

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25. SHADICK, S. 1975. Highlights of Saskatoon bird observations, 1970-1974. *Blue Jay* 33:165-168.

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29. WESELOH, D.V. 1987. Little Gull. In Atlas of the breeding birds of Ontario (M.D. Cadman, P.F.J. Eagles and F.M. Helleiner, editors), Univ. of Waterloo Press, pp. 178-179.

Within three weeks of hatching, most young robins were within 0.1 mi of their nests in a Massachusetts study. Within six weeks, most were still within 0.2 mi, and after eight weeks, a quarter of them were within 0.2 mi and one-third had dispersed more than 0.5 mi. D.H Firth et al. 1969. *Birdbanding* 40:208-215.

BIRDS OUT MY WINDOW

CARMAN DODGE, Box 1933, Prince Albert, Saskatchewan. S6V 6J9

With the changing seasons different species of birds come and go. Over the past five or six years, I have kept track of the birds out my window. The list below does not include all those seen as I know that some ducks and one or two hawks were not recorded:

Common Loon
White Pelican
Double-crested Cormorant
Great Blue Heron
Tundra Swan
White-fronted Goose
Snow Goose
Mallard
Common Goldeneye
Common Merganser
Turkey Vulture
Osprey
Bald Eagle
Golden Eagle
Merlin
Sandhill Crane
Franklin Gull
Ring-billed Gull
Herring Gull
Black Tern
Rock Dove
Common Nighthawk
Barn Swallow
Black-billed Magpie
American Crow
Northern Raven
American Robin
Cedar Waxwing
European Starling
Red-winged Blackbird
Evening Grosbeak
House Sparrow

Okay, you may notice that not many of these are "small" birds, but when you are seven floors up in an office building overlooking the North Saskatchewan River, without the aid of binoculars, the "big" birds will do.

A Pectoral Sandpiper, banded east of Saskatoon on 20 September 1961, was recovered in Yakutia, Russia, on 28 May 1963. In its lifetime it had probably migrated from eastern Russia through the Prairie Provinces to South America and back – at least twice. Houston and Martinez. 1969. *Birdbanding* 40:146.

COPY-CAT FEEDING OF HOUSE SPARROWS

FRANK SWITZER, 1301 Shannon Road, Regina, Saskatchewan. S4S 5K9

I don't know many bird watchers who would take the time to observe some of the feeding habits of House Sparrows. Well, I didn't start out to intentionally study the eating habits of the House Sparrow. You might say that these observations started with morning coffee on the patio.

House Sparrows are not my favourite birds. Growing up on a farm almost seems to dictate that this bird be viewed as "pesky vermin" that should be under threat of death on a continual basis. I did not find the continuing task of plugging farm building holes as offering fulfilling and meaningful productive activity. In spite of all efforts, there would come a day when a granary was opened and the over winter roost of a flock of this pesky bird was abundantly evident. The barn hayloft was another impossibility and each year there seemed to be a strip of peeling paint on the combine when it came out of the machine shed. To add insult to injury newly sprouted lettuce was harvested while at the sparrow mouthful size, just when anticipation peaks for that first feed of something homegrown, fresh and green.

Thirty years of eight-to-five somewhat dull memories of youth and House Sparrow intolerance. Indeed, there is a somewhat grudging admiration for a creature that endures the heat and drought of summer and the frigidness of winter along with you. And, that brings us back to a summer morning coffee on the patio. The apple tree is in full bloom, the air is pungent and a flock of Cedar Waxwings descends. The apple tree is being ravaged, waxwings are feeding voraciously on the petals. Of course, this activity is probably helping to enhance the fruit crop since pollen is being liberally spread around. Then, quite unobtrusively several House Sparrows quietly move in and seem to become very interested in the feeding antics of the waxwings. After a few minutes the sparrows begin tentatively tearing petals from blossoms but not eating them. Instead they pluck the petals and discard them, continuing to tear the stamens and then the ovary leaving only the flower stem. They then move on to the next. The whole process stops when, in an excited flurry, the waxwings depart for a tree in the neighbouring yard.

A few mornings later, with my coffee in hand and binoculars within reach, I watch a Northern Oriole visit the apple tree and start to deftly insert its beak into the rolled up leaves of the Leaf Roller Moth to extract the tasty larva from within. The oriole is very deft at this task and successfully visits several rolled leaves. Again the sparrows appear and become very observant. The sparrow's first attempts are unsuccessful as first one end of the leaf roll is tried and then the other. It appears as if the grub inside moves far enough to escape the probing beak. However, the tantalizing morsel inside is not to escape for long, for soon the leaf roll is torn apart and the worm consumed. The sparrows then move from rolled leaf to rolled leaf, tearing them apart in turn, to get the delicacies inside.

These two incidents started my curiosity. Was there indeed a degree of copy-cat feeding as a part of House Sparrow make up? The observation quest was on.

Most bird books and field guides in my library do not provide detailed information on the feeding habits of specific species. They treat feeding habits in a general way, while giving details on appearance, voice, nesting, habitat and range. Primary observation is the course one must follow.

I began to note the occurrences of House Sparrows in company with other species. During the summer, more often that not, when robins were feeding on the lawn or in the garden, there would also be sparrows. Sparrows never seem to try digging anything out of the ground as do robins. However, they did seem to find something to their liking as surface finds in the garden and they invariably flushed moths out of the lawn grass, giving chase and catching most. If the lawn grass contained significant numbers of these small moths, sparrows would continue to return and randomly hop around to flush more moths.

The next good example of copy-cat feeding I saw while watching Eastern Kingbirds feeding on grasshoppers. My attention was drawn to this activity when a pecking sound was heard on the top of the back fence. Beyond the fence is a park area that opens onto cultivated fields across the Trans-Canada Regina bypass. With inflights from highway ditches and fields, the park grasshopper population can rise significantly during July and August. This readily available food source coincides with hungry Eastern Kingbird nestlings. I have watched repeated kingbird grasshopper captures. The kingbird starts its hunt by flying in to perch on the fence corner. This vantage point is used to survey grasshopper activity below. A darting swoop low to the grass usually results in a capture and then a return to the fence. The next step in the process is to hammer the wildly kicking grasshopper on the boards knocking off legs and wings. When the grasshopper is satisfactorily bashed into submission, it is then taken to feed the nestlings.

Enter the House Sparrow. Sitting on the fence nearby it appears to carefully watch the kingbird technique. Sparrow-copied kingbird activity follows with great leaping, fluttering bounds after a grasshopper that escapes with a prolonged flight following two or three jumps. The sparrow returns with the arrival of the kingbird. However, this time the sparrow spies the dropping grasshopper legs and wings and it descends to the base of the fence to pick up and consume these unwanted parts. Soon several sparrows are combing the garden and the grass under the fence corner to pick up grasshopper parts.

The next observation episode also involves copying kingbird feeding techniques. Each year the apple tree drops several pails of unripe apples on the lawn below. These apples are picked up before each mowing and dumped into the compost box by the back fence gate. Here the apples mellow until a state of decay attracts flies and yellow-jacket hornets. This abundance of flying insects is definitely attractive to Eastern Kingbirds. They arrive to perch on the back fence from whence they drop down to pick a flying insect from the top of the apples then return to the fence to consume the morsel. If the catch is a large fly there is a bit of bill manipulation, then the insect is consumed. If, however, the captured insect is a hornet the procedure is to do the bashing-in-the-fence routine until a suitably pulpy state is achieved; then, and only then, is the morsel consumed.

House Sparrows copy-cat feeding in this case is always just that, copy-cat feeding. It is fairly accurately copied right down to the hornet bashing before consumption. What I found surprising was that, when the kingbird finished feeding at the compost box, the sparrows also left, in spite of an abundance of flies and hornets remaining.

Now, I know, one summer's observations do not make a study of House Sparrow feeding behaviour. However, I found these observations most enjoyable and in the process I learned something about a creature that I all too often either take for granted or view with some disdain and will always consider a rather messy pest.

The fine spring weather of 1991 April brought forth the chair on the patio and the morning coffee. It sure is great to once again share the backyard with northward migrants. A male robin is acting territorial. Since earthworms are still scarce the robin territory includes apparent exclusive feeding rights in the Russian Olive at the back fence. The robin's olive consumption is quite selective. First a likely cluster of silvery berries are plucked and rolled around in a bill-jiggling process. For whatever reason several are discarded and dropped to the ground before one is finally consumed. The process is repeated for the consumption of about three or four fruits.

After a territorial disagreement with another male robin and a singing tour of territory, the resident male returns to the ground beneath the Russian Olive tree. Several olive pips are ceremoniously regurgitated, now stripped of the silvery green outer flesh. The fruit previously dropped to the ground is reexamined in a selection process and again the three or four berries are consumed. This selection activity has been keenly observed by three House Sparrows. When the robin leaves they descend to the ground and begin billing the olive fruit. A House Sparrow's bill is evidently better designed to strip the tough outer coat from the olive fruit. However, this tough dry skin and pulp is discarded. The now cleaned pip is billed further but is still too large to consume and is also dropped. Several fruit are thus dealt with by each House Sparrow before a decision is made to abandon this activity as a potential food source. The sparrows depart and in due course the robin returns to make a selection of Russian Olive berries based on criteria known only to him.

Because their caterpillars eat milkweed, Monarch butterflies are considered to be distasteful, even poisonous, to birds. However, at wintering sites in Mexico, Monarchs are the main food of Black-headed Grosbeaks. Some milkweed are less poisonous than others and the butterflies become less toxic with time. Scott. 1986. *Butterflies of North America.* Stanford University, Stanford.

Spiders are the major predators of butterflies. R.M. Pyle. 1984. *Audobon Society Handbook for Butterfly Watchers.* Scribner's, New York.

FEMALE SCAUP INCUBATES RING-BILLED GULL EGGS

KEVIN J. MCCORMICK and JACQUES SIROIS, Canadian Wildlife Service,
Yellowknife, Northwest Territories. X1A 2N5

During June 1986, we conducted a survey of larid breeding sites along the North Arm of Great Slave Lake, Northwest Territories.[1] On June 24, we inspected a large Ring-billed Gull colony (132 nests) (UTM location: NV 7950 4500) which also included four scaup nests. After flushing one female scaup, we discovered that the nest contained nine scaup eggs plus two Ring-billed Gull eggs. One gull egg was fully pipped (end of egg shell was completely removed) and a still-wet chick had vacated the other egg. The scaup eggs showed no signs of impending hatch.

The duck that we flushed was probably a Lesser Scaup,[8] Trauger and Bromley indicated that Greater Scaup are more abundant on the West Mirage Islands; approximately 60 km southeast of this site.[5] However, Sirois and Seddon reported only one Greater Scaup nest among 26 Lesser Scaup nests located at 22 larid breeding sites on near-shore islands along the North Arm.[3] Clearly, Lesser Scaup are most common on the mainland adjacent to the North Arm.[4]

The scenario resulting in the scaup and gull clutches becoming mixed is not entirely clear. The nest was a shallow depression surrounded by large, overhanging tufts of grass – a typical Lesser Scaup nest.[2] However, available evidence suggests that the nest was initiated by a Ring-billed Gull and probably also incubated, in part, by her. Lesser Scaup hens lay at a rate of one egg per day with a possible one-day interval during clutch deposition; incubation begins after the clutch has been completed.[2] Therefore, if the scaup hen did all the incubating, the scaup clutch would

Ring-billed Gulls *G.W. Beyers-Bergen* have been initiated 32-37 days previously (nine days for laying the scaup eggs plus 23-28 days for incubating the gull eggs).[7] This would suggest that the scaup clutch was initiated between 18-25 May – an unlikely situation given the nesting chronology on the nearby mainland. Lesser scaup do not begin laying before 1 June and most have not initiated before the second week of June (J. Hines pers. comm.).[4] Accordingly, even the earliest females do not begin incubating before 10 June.

Approximately 28% of the other Ring-billed Gull nests contained at least one chick, indicating that these two gull eggs were laid in synchrony with the rest of the colony. Such synchrony suggests that the gull eggs were incubated initially by a Ring-billed Gull and later taken over by the scaup. Vermeer reported that Lesser Scaup were attracted to larid colonies only after the larids had started nesting.[6] In this case, it appears that the Lesser Scaup displaced a Ring-billed Gull from her nest or took possession of a nest that had been abandoned. The fate of the gull chicks or scaup eggs is unknown.

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2. PALMER, R. S. 1976. Handbook of North American birds. Vol. 3. Yale University Press, New Haven and London. 560 pp.
3. SIROIS, J. and L. SEDDON. 1990. Status of larid breeding sites between Frank Channel and Yellowknife Bay, and other observations of larids in the North Arm of Great Slave Lake: 1988. Tech. Rept. Ser. No. 90, Can. Wildl. Serv., Yellowknife. 44 pp.
4. TRAUGER, D.L. 1971. Population ecology of Lesser Scaup (*Aythya affinis*) in subarctic taiga. Unpubl. PhD Thesis, Iowa State Univ., Ames. 118 pp.
5. TRAUGER, D. L. and R. BROMLEY. 1976. Additional bird observations on the West Mirage Islands, Great Slave Lake, Northwest Territories. *Can. Field-Nat.* 90:114-122.
6. VERMEER, K. 1968. Ecological aspects of ducks nesting in high densities among larids. *Wils. Bull.* 80:78-83.
7. 1970. Breeding biology of California and Ring-billed Gulls: a study of ecological adaptation to an island habitat. Rept. Ser. No. 12, Can. Wildl. Serv., Ottawa. 52 pp.
8. WELLER, M. W., D. L. TRAUGER and G. L. KRAPU. 1969. Breeding birds of the West Mirage Islands, Great Slave Lake, Northwest Territories. *Can. Field-Nat.* 83:334-360.

Lesser Scaup *Fred Lehrman*

SPOTTED REDSHANK SIGHTED NEAR REGINA

JOHN F. NELSON, 26 Lawson Street, Regina, Saskatchewan. S4R 3P7

On 30 July 1990, my 14-year-old grandson and I were checking shorebirds at Brown's Slough, a favourite location some 10 km northwest of Regina. We identified the usual variety for that area such as Greater and Lesser Yellowlegs, Willets, Marbled Godwits and some Peeps, when Stephen said, "Grandpa, there's a 'different' bird out there." I suggested that it was probably a Greater Yellowlegs, but he brought me up short by saying, "This one has red legs."

This particular shorebird was feeding somewhat apart from the other birds in that section of the slough – in tall grass in about ten cm of water. When we scoped the bird, the red legs were unmistakable. Other features that caught our attention were the light-coloured basal part of the lower mandible, a light-coloured lower forehead, and Stephen also noted a slight downward curve of its beak.

We checked the various bird guides we had with us but couldn't quite make up our minds until we looked at Godfrey's Birds of Canada.[1] There on the bottom of Plate 27 was our bird – a Spotted Redshank (*Tringa erythropus*), in winter plumage.

What made this bird particularly exciting was the fact that there were no records for the Canadian interior. Godfrey lists its status as "...several sight records for British Columbia, a sight record for Newfoundland..." and two records for Ontario. The National Geographic Society lists it as a "rare spring and fall visitor to Aleutians and Pribilofs; casual on both coasts during migration and winter."[3] Peterson lists records from Ontario, Newfoundland, Connecticut, Rhode Island and Pennsylvania.[2]

Frank Brazier checked his copies of *American Birds* and found a reference to this species as having been noted at Las Vegas, Nevada, from 16-20 August 1975 (*Am. Birds* 30:102).

Brazier and I checked the slough later in the day, but our bird was gone.

Stephen and I returned to Brown's Slough the day following our sighting, but our bird had disappeared. This was an unforgettable experience equally for Stephen who has just started in this fascinating hobby, and for myself who has spent some 60 years pursuing birds.

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2. PETERSON, R.T. 1980. Field guide to the birds of eastern and central North America. Houghton Mifflin, Boston. 384 pp.
3. SCOTT, S.L. 1987. Field guide to the birds of North America. Natl. Geographic Soc., Washington, D.C. 464 pp.

MOUNTAIN PLOVER SIGHTING NEAR REGINA

FRANK H. BRAZIER, 2657 Cameron Street, Regina, Saskatchewan. S4T 2W5

About 4:00 p.m. on 1 October 1990, a fine, sunny day, Marjie and I were driving westwards on the north side of Monica Farm's slough (see Map 3, p. 27).[1] I stopped to scan the water and the south shore through my binoculars when I noticed a plover feeding at the water's edge. It was not a Killdeer so I put my telescope on it and discovered a Mountain Plover. I was familiar with the species from observations in Montana. The bird had no trace of black anywhere, and the white forehead, eyebrow and throat were prominent. There was some buff on the breast, and as I watched, it raised one wing to its limit so that the white lining could be plainly seen. I watched it for several minutes while it fed in the shallow water, then with its plain brown back to me it flew up, calling, and joined four others which swept in low from the west end of the slough, giving the same call. For an instant I had all five in my telescope as they flew off southwards - all were exactly the same. Scott notes that the species is gregarious in migration so I suppose five birds together are not unusual.[10]

When Wayne Harris saw a Mountain Plover near Val Marie, Saskatchewan, on 14 May 1987, it was only the fifth record for Saskatchewan, but his momentous find of a pair with three young on 31 July 1987, in a Prairie Dog colony, also near Val Marie, was the first known successful breeding in Saskatchewan.[3,4] All six records occurred in extreme southwestern Saskatchewan so our sighting at Monica Slough, near Richardson, would be the first reported at considerable distance from there; Val Marie is about 266 km southwest of Richardson.

Where shorebirds are concerned it is always pleasing and interesting to read what Matthiessen has to say.[5] Regarding migration, he observes:

> "In one of the most rigid and least explicable of all migrations, this plover travels southwest six hundred miles from its breeding grounds on the Great Plains across the Rockies and the Coast Ranges of California; many of the arrivals in California then proceed south into northern Mexico, a region reached easily from the Great Plains without the trouble of negotiating two north-south ranges of high mountains. (Despite its name which was given it only because the first specimen was taken in the Rocky Mountain foothills, this bird is not partial to mountains: it is a bird of short-grass country and would be better named the plains plover.) So fixed is it in its habits that though it breeds in Montana and Wyoming, it has never been recorded in the adjoining state of Idaho, nor in Nevada, nor in Oregon" (p. 144).[5]

Important occurrences of birds sent to *American Birds* are usually reported in bold face type, and such are indexed annually, but the designation is the responsibility of the authors, so an important observation not designated in bold face is not indexed. I scanned the indexes back to

1967 and found the following:

Oregon – two Mountain Plovers near Corvallis Airport, 2 Jan. 1967[2]; a Mountain Plover at Tillamook Bay jetty, 16-26 Nov. 1977[6]; one near Lincoln City in Feb. 1983, provided the fifth record for Oregon[7]; two Mountain Plovers reported, without details, south of Bandon, Oregon 6 Dec. 1989, would be Oregon's fifth (*sic*) records.[11]

Idaho – possibly the second sighting occurred on 29 May 1977 about 35 mi. north of Arco.[9]

Nevada – nothing indexed.

I thought that my five birds were wildly off course but the indexes reveal that they have been reported in Mississippi (one in winter 1988/89), Virginia (one on 16 Oct. 1976); Alabama (one on 6 Jan. 1973; one in spring 1984); Michigan (one on 13 May 1976); Florida (one on 2 March 1981 – fifth record, first in spring); and eastern Washington (one on 6 May 1968 – first record).

Mountain Plovers are birds of the short-grass prairie so I was surprised to find them foraging in water, yet the indexes reveal that McCaskie reported one on the beach north of Morro Bay in southern California on 22 October 1989; he observed it was frequenting unusual habitat for this species.[8] Initially, I was concerned that as one of my birds was feeding in water it could cast doubt on my identification, so it was good to find that its feeding mode, while unusual, was not unique. The indexes also record several coastal occurrences.

1. ADAM, C.I.G., B. RIFFEL, A. LUTERBACH, and H. KREBA. 1985. A birdfinding guide to the Regina area. Sask. Nat. Hist. Soc. Spec. Publ. 16, Regina.
2. CROWELL, JR., B. 1967. Audobon field notes 21:450.
3. GOLLOP, J.B. 1987. Prairie Provinces region. *Am. Birds* 41:448-450.
4. GOLLOP, J.B. 1987. Prairie Provinces region. *Am. Birds* 41:1451-1453.
5. MATTHIESSEN, PETER. 1973. The wind birds. Viking Press, New York.
6. MATTOCKS, JR.,W. and E.S. HUNN. 1978. Northern Pacific Coast Region. *Am. Birds* 32:245-250.
7. MATTOCKS, JR.,W. and E.S. HUNN. 1983. Northern Pacific Coast Region. *Am. Birds* 37:329-332.
8. McCASKIE, GUY. 1990. Southern Pacific Coast Region. *Am. Birds* 44:160-165.
9. ROGERS, H. 1977. Northern Rocky Mountains – Intermountain Region. *Am. Birds* 31:1162-1166.
10. SCOTT, L. 1987. Field guide to the birds of North America. Nat. Geog. Soc., Washington, D.C.
11. TWEIT, BILL, and JIM JOHNSON. 1990. Oregon/Washington Region. *Am. Birds* 44:317-321.

The average flowering date for the Crocus of Pasque-flower is 11 April at Winnipeg, 18 April at Saskatoon, and 25 April at Edmonton. R.C. Russell. 1962. *Canada Plant Disease Survey* 42:162-166.

BLACK-TAILED GODWIT SIGHTED NEAR REGINA — FIRST FOR INTERIOR NORTH AMERICA

FRANK H. BRAZIER, 2657 Cameron Street, Regina, Saskatchewan. S4T 2W5

Saturday, 14 July 1990, was a beautiful day and at 3:30 p.m. the sun shone brightly. My wife, Marjie, and I drove south on the road across Brown's Slough, which is about 12 km northwest of Regina as the crow flies, and a good place for shorebirds. We saw a couple of Stilt Sandpipers, a Greater Yellowlegs, and, close by the latter, a wader which was noticeably larger and with more of its legs visible above the water. It was feeding avidly using its long, straight bill (about twice the length of the head) to seize prey. As I focused my binoculars on it, I knew that I had never seen this bird before.

I snatched up my telescope and focused on it. I could see that the bill was bi-coloured, the basal half being dull yellow and the rest black. The plumage was generally light grey, much like a Willet. While it fed mostly by picking from the surface, on three occasions it spied prey about 2 m away and below the surface (as I could see nothing), ran toward it and seized it without submerging the head. I got the impression it was a very hungry bird! On the third run at prey it stopped close to an emergent clod of earth, and climbed on top of it where it stretched itself and looked around. I was amazed at the inordinately long legs it displayed which appeared to be the colour of an Avocet's, greyish-blue.

All the time we watched it the wings were never opened but I could see a horizontal black line formed by the closed primaries and secondaries. The bird changed position on the clod twice so I could see that the tail was solid black at the distal end and white basally, the white extending up the rump. I could see no pattern or colour on the uniformly pale grey body, grey sides of the chest and white underparts. Regrettably, time was pressing so we had to leave. I had no idea of the bird's identity but I thought I had sufficient field marks to allow me to find its name without trouble.

We were home by 4:30 p.m. and although I made numerous phone calls I could locate no one who could go out and check my find. I returned to Brown's Slough at 7:30 p.m., but could not relocate the bird.

At home I went through most of my bird guides but could find no picture to match my bird. Next morning over coffee with Fred Lahrman I described it and he suggested that the bi-coloured bill would make it one of the godwits, of which there are four species. That evening I checked further and this time I found it. Slater, Plate 41, shows a Black-tailed Godwit (*Limosa limosa*) agreeing essentially with the bird I saw.[12] The text on pp. 85 and 308 describe it as having a long, straight bill, the legs and feet being greenish-grey (the legs in the painting seem to be grey). I now realized that this godwit does not always have an upturned bill. The author states: "RANGE – Breeds in temperate regions of Eurasia. Non-breeding birds disperse south to Africa, southern Asia, and Australasia." Slater's bird is a non-breeder and in winter plumage, which mine would also be. The legs of the bird are shown to be exactly the same length as those of the adjacent Bar-tailed Godwit (*L. lapponica*) in the plate, whereas he states that the legs of the Black-tailed Godwit are longer than those of the Bar-tailed. I located a photograph of a Black-tailed Godwit in Smith showing it perched on a post; the legs appear to be twice as long as the body depth.[13]

Hollom depicts the legs to be about twice the body depth, much like my bird.[5] Indeed, Hollom states: "...its longer legs give it a noticeably taller, more upstanding appearance, in contrast to Bar-tailed whose legs look rather short for the bird's size; and its bill is longer and quite straight or only very faintly upcurved" (p. 200).[5] Elsewhere he says the bill is pink basally shading to black.

I was puzzled to find that published accounts of leg colour varied. In Chandler's four photographs (one juvenile, three adults) they appear to be lead-grey (juv.) and black (adults).[1] Cramp for adults and juvenile states: "Legs and foot lead-grey to black with olive tinge."[2] Hollom says the legs are greenish-black.[5] Peterson et al. does not describe the leg colour but in the painting the legs appear to be black.[8] Prater et al. state: "Legs dark greyish."[9] Scott does not describe leg colour but they appear to be dark grey in the paintings.[11] Slater states: "Legs and feet greenish-grey."[12] None of these descriptions or pictures come close to matching the shiny greyish-blue legs on my bird. However, in R.S.P.B. Chart No. 7, the Blacktailed Godwits clearly show their long greyish-blue legs.[10] Chandler remarks that "general coloration varies with age and season" are enlightening.[1] Perhaps my bird was a young one and its bill will turn up slightly and its legs darken as it matures.

The feet and other soft parts of dead birds darken in relatively short time. Bird book illustrators painting from museum specimens and unfamiliar with the birds in life could unintentionally produce an inaccurate picture.

In July, Saskatchewan shorebirds are already moving south, and some will have lost their spring plumage, so I have to consider the possibility that my Black-tailed Godwit was actually a Hudsonian Godwit. While Scott does say that they resemble each other in winter plumage, Prater et al. give measurements to show that the Black-tail is the larger bird and the length of the tarsus is greater.[9,11] Godfrey also notes that it is larger.[4] My bird had inordinately long legs whereas the Hudsonians I have seen never struck me that way. Specimens in the Saskatchewan Museum of Natural History and the paintings of the Hudsonian in winter plumage in Scott,[11] Peterson[7] and Lowery[6] all show that it has a narrow white terminal band to the black tail whereas my bird lacked that feature; the terminal part of its tail was black to the end.

I have examined the "Index of Bold-faced Birds" in *American Birds* from 1967 to 1989 (Vols. 21-43) without finding a single mention of Black-tailed Godwit in interior North America. If one looks at the plates in the two Peterson field guides depicting the Black-tailed Godwit in flight (p. 94) and the Willet in flight (p. 115) the resemblance is amazing.[8,7] If a Black-tailed Godwit flew with a flock of fall Willets it could easily be overlooked.

Elkins, discussing the probable effect of global warming on British birds in the next 40 years, points out that ice-melt would adversely affect waders by reducing their coastal and estuarine habitats.[3] During this process there would be weather pattern changes which, in turn, would possibly disrupt migrations and increase vagrancy. Right now vagrants are being recorded at remarkable frequencies all over and no one knows how many escape detection. We should all be prepared to recognize a vagrant when it crosses our paths and then be able to identify it. This means our personal libraries should have a good selection of foreign field guides to increase our familiarity with birds around the world, especially those which are likely to reach our personal birding areas.

Godfrey points out that the Blacktailed Godwit and the Hudsonian Godwit can only be separated by the underwing colours but this is in the context of flying birds.[4]

As I did not take it as a specimen nor did I photograph it, I offer the Black-Tailed Godwit as an addition to the Hypothetical List of Saskatchewan Species.

1. CHANDLER, RICHARD. 1989. The Facts on file guide to North Atlantic shorebirds. Facts on File, New York.
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3. ELKINS, NORMAN. 1990. What does global warming mean for our birds? *Scottish Bird News*, June, 1990. Scottish Ornithologists's Club, Edinburgh.
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Ed. Note: From another source, Black-tailed Godwit legs are describes as "long, dark grey or blue-grey." Total length and tarsus of the Black-tailed Godwit are given as 360-440 mm and 59-96 mm, respectively; for Hudsonian Godwit, they are 370-420 mm and 52-72 mm. HAYMAN, MARCHANT, and PRATER. 1986. *Shorebirds – An identification guide to the waders of the world*. Houghton Mifflin, Boston. 412 pp.

Stone is storyteller.
Stone is meditation master.
Stone performs the dance of stillness.

F. Lehrman. 1988. *The Sacred Landscape*. Celestial Arts, Berkeley, CA.

SPRING AND SUMMER PREY OF BURROWING OWLS IN ALBERTA

JOSEF K. SCHMUTZ, Department of Biology, University of Saskatchewan,
Saskatoon, Saskatchewan. S7N 0W0, and GWENDOLYN and DANIEL WOOD,
Box 74, Castor, Alberta. T0C 0X0

When animals show a preference for one type of habitat over another, there are at least two different features of the habitat that could be the cause: food, and suitable cover which affords protection from predation. In attempts to conserve natural populations, it is useful to understand which factor is important and at what time of year. Declines in the distribution of Burrowing Owls in western Canada have been primarily attributed to loss of grassland habitat. Other factors, including a shortage of nest burrows, the use of insecticides and rodent poisons, and the shooting of owls, are considered secondary.[18]

We examined pellets, prey remains and feeding habits of Burrowing Owls in the Hanna area of southeastern Alberta in spring and summer. We suspected that cricetine rodents (mouse/vole) may be an important food source after the owls arrive in spring, while insects may be more easily obtained and, therefore, predominate in the owl's summer diet.[6]

Study Area and Methods

The owls nested in a semi-circular band encompassing the towns of Dorothy, Sunnynook, and Richdale, south and east of Hanna, Alberta. The brown soils exist in a "swell and swale topography" with approximately 15% of the land under cultivation for dry-land agriculture. Past annual precipitation was approximately 40 cm per year.[5]

We found owl nests by inquiring from landowners, by searching previously used nesting areas, and during an ongoing study of prairie raptors in the region.[11] We examined 234 pellets collected from 11 nests at nine different times (418 days apart) between 30 April and 4 July 1990. We collected whole pellets and those which had fallen apart but were still identifiable as one pellet. Our main aim was to identify prey items to class (*Insecta*, *Aves*, *Mammalia*) but we also identified items to genus and species where possible. For identification we compared the prey remains to specimens collected in the field, to insect collections held at the University of Saskatchewan, and to field guides.[1,16] When we found insect and rodent parts in one pellet we assumed that the owl, not the rodent, had eaten the insect. In addition to recording the prey classes represented in each pellet, we attempted to quantify prey items by counting the minimum number of individuals represented in a pellet, using elytra, wings, jaws, or pelvic girdles for counting individuals.[10] Because a rodent skull could have been included in one pellet and most of the fur of the same rodent in another pellet, we quantified conservatively by counting mice only by skeletal remains.

Results

Prey: In a total of 234 pellets we found rodent bones of fur in 202, insect parts in 136, a lower jaw of a juvenile Richardson's Ground Squirrel in one, and feathers in two pellets. Our conservative count suggests that the owls consumed 136 (35%) cricetine rodents, 247 (64%) insects, 2 (<1%) birds and 1 (<1%) juvenile Richardson's Ground Squirrel.

Although rodents were apparently an important prey item in all four months, the owls took more rodents in April-May than in June-July (Fig. 1). The proportion of pellets that contained rodent, insect or rodent and insect parts combined varied over time (G=21.21, df=6, P <0.001).

Since we could never actually examine the owls' nests, we rarely found parts or whole prey. During the five years of our Burrowing Owl study, we recorded only ten whole prey items. These included three voles (*Microtus* sp.), three mice (*Peromyscus* sp.), one Richardson's Ground Squirrel, one Tiger Salamander, and two frogs (*Rana* or *Hyla* sp.).

Some prey fragments in the pellets allowed us to identify prey items beyond the class or family level. Examining 98 lower jaws we found that the owls preyed on 1.45 vole for every mouse. Identifiable arthropod parts included those of grasshoppers (*Acrididoidea*), and beetles (*Nicrophorus* sp. and *Melanoplus* sp.). The large number of carrion beetles (*Nicrophorus* sp.) in comparison with the rarity with which we observed them in the field was striking.

Foraging Habits: In comparison to the much larger rodent prey, insects probably require more energy expended by the

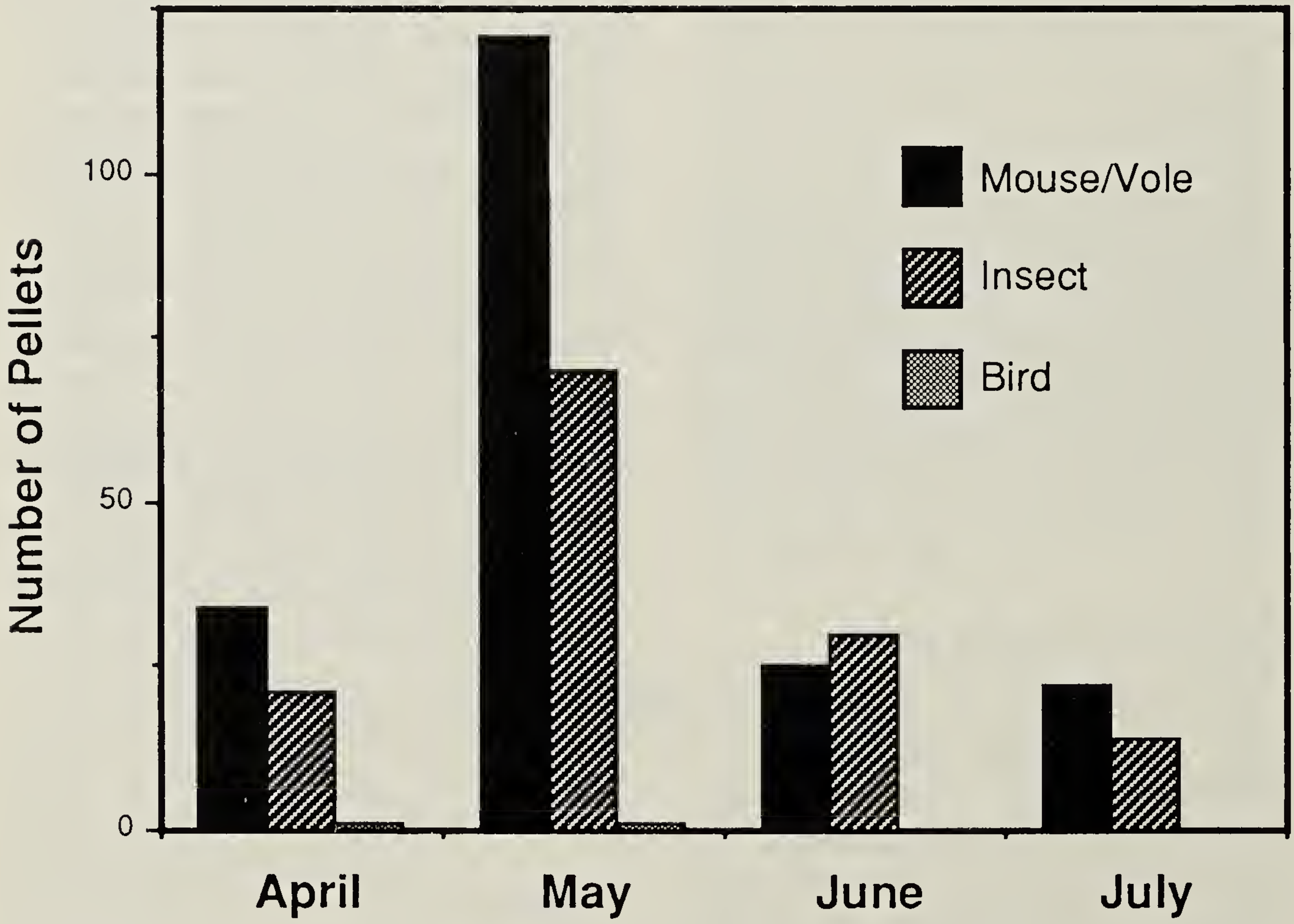

Figure 1. The number of Burrowing Owl pellets containing the remains of mouse/vole rodents, insects, and birds in southeastern Alberta in 1990. The actual number of pellets is inflated because we included pellets with insect and mouse/vole remains combined in both the insect and mouse/vole categories.

hunting owls per unit energy gained. We recorded feeding habits of owls in detail at 19 nests. Of the five hunting methods employed by Burrowing Owls as described by Haug, we have noticed four in the field.[5] Owls roosting on burrow mounds frequently ran a few metres to capture insects: "ground hunting." According to our observations, this was the first hunting style employed by fledgling owls. One owl flew approximately 20 times in ten minutes from the mound into the air at a steep angle, caught insects and returned to the burrow mound: "flycatching." We saw owls intently looking around from a perch, "perch hunting," and "hovering," but never "gleaning" insects from tall vegetation.

Whether insects were taken in mid-air or on the ground, they were always caught with the talons. When "flycatching," the owl focused on the flying insect, flew in a straight line, swerved up to capture the insect, turned immediately and returned to the original vantage point on the ground. In most cases the insect was transferred to the beak during the glide back to the ground. Such flights were usually 10-30 m long and never longer than 75 m. The owls rarely missed their prey on calm days, but did so more frequently on windy days. After each miss, the owl returned to the mound and did not pursue the insect. Rodents, in contrast, were pursued vigorously when missed.

The net energy gain by owls employing "ground hunting" may be greater than those using flight. Insects were usually spotted by the owl a short distance away and caught in a pounce. In one instance, when an owl flew 500 m from the nest which we visited, the owl took approximately 30 min. to return, walking leisurely within 30 m of the nest, pouncing on many insects along the way.

We assigned sex to the owls based on plumage coloration (D. Wood unpubl. data). We observed both males and females feeding their young on the mound. However, when the young were underground the male transferred the prey to the female who disappeared below ground. We have never seen a male enter the nest burrow when young were present. According to Bent, Burrowing Owls have "stockpiled" prey in the nest burrow.[2] At a nest outside the study area, we have observed a stockpile of over 50 grasshoppers with legs that have been removed and piled nearby. When eating rodents, the owls reject viscera at least some of the time.[12]

Discussion

Studies of food habits of hole-nesting owls are biased in favour of prey with sizeable keratinized or ossified parts because counts of prey items rarely can be used in these species to correct for bias inherent in the pellet analysis.[10,14] Our study is subject to this bias also. Nonetheless, we believe that our results suggest convincingly that mouse/vole and insect prey are important to Burrowing Owls. Some of the less common prey items may have gone undetected. The results of our study are in general agreement with other studies that suggest that cricetine rodents, arthropods, and birds form the main food of Burrowing Owls.[5,15,17]

The owls in our study took more voles than mice as prey. Conversely, our trap sample included more mice that voles. During 7500 trap-nights, set to include the cool evenings and mornings, we caught 113 mice and six voles.[11] Because we did not leave our traps set for the entire day, we may have underestimated the abundance of the diurnal voles in relation to the nocturnal mice.

Haug studied the food habits of Burrowing Owls on a study area south of Saskatoon, Saskatchewan, approximately 400 km ENE of our area.[6] Some differences in the owls' food habits were apparent between the two areas. On the Saskatoon study area, where land use involved extensive cultivation, small mammals were apparently much less important in the owls' diet (5% of identifiable items) compared to our study (35%). Grasshoppers were more important as prey on the Saskatoon study area (95% of items) than near Hanna (64%). Based on Agriculture Canada and Alberta Agriculture survey data, our study area was in a region of low to moderate grasshopper density compared to other areas of Alberta – from 0-2/m^2 to 4-6/m^2 between 1982 and 1986.[9]

Carrion beetles appeared to us to be more common in the owls' diet than in the field. It is conceivable that the beetles were attracted to the prey stored in the owls' burrows and thus fell prey to owls. Smith and Murphy also found a high number of carrion beetles in Burrowing Owl pellets.[15] They suggested that the owls, which in their study apparently fed on roadkilled Black-tailed Jack Rabbits (*Lepus californicus*), may have found carrion beetles at the rabbit carcasses.

Owls in our study tended to have higher average brood sizes (range 4.2-5.7 between 1986 and 1989)[13] than other populations in Manitoba and Saskatchewan.[6] This comparatively high productivity may be linked to the protection of the grassland resource and the ranching economy which predominates in our study region. During our study, only approximately 15% of the grassland was cultivated. Grassland has been protected by the Special Areas Board of the municipal government, since the 1920s.[4] The protection of grassland, through a restriction on cultivation and grazing pressure, may have encouraged populations of voles and mice. Overgrazing of grassland is detrimental to cricetine rodents, the owls' prey.[3] A source of cricetine rodent prey may have been particularly important to the owls in spring when insects are inactive on cold days and energy demand is high during egg laying. This hypothetical scenario suggests that the conservation of Burrowing Owls not only requires the protection of grassland, but also the maintenance of grassland in a state where vegetation can support a viable cricetine rodent community. It is noteworthy that while populations of this species are still declining in Saskatchewan (P. James, pers. comm.), our study population appears to be stable.

The owls' habit of not consuming the viscera of rodents may be instrumental in reducing a potential detriment that could arise from rodent poisoning campaigns.[11] James et al. could find no difference in adult owl survival or reproduction between control areas where ground squirrels were poisoned by strychnine.[8] Similarly, Swainson's Hawks, which also reject the viscera of their ground squirrel prey, survived after eating poisoned ground squirrels with viscera removed.[11]

Acknowledgements

We acknowledge Carrie, Cody, Ray-Anne and Richard Mashon for collecting pellets for us. David Moody painstakingly teased the pellets apart and recorded prey. We also thank Dylan and Norah Moody for collecting pellets and noting prey found. Local landowners were graciously hospitable to us, especially Greg and Karen Gordon. We are grateful to Bob Randell for identifying arthropod remains. Betsy Haug provided helpful comments on an earlier version of this manuscript. This project was supported by the Endangered Species Recovery Fund (Co-sponsored by Environment Canada, Canadian National Sportsmen's Shows, and World Wildlife Fund Canada), the Alberta Fish and Wildlife Division, the Alberta Recreation Parks and Wildlife Foundation, the Special Areas Board of Hanna, and the University of Saskatchewan.

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The wind is an ardent woman.
She sees in sand the still image of her lover, water.
She combs his hair into long waves.

F. Lehrman. 1988. *The Sacred Landscape.* Celestial Arts, Berkeley, CA.

BLUE JAY SCAVENGING WINDOW-KILLS

ROBERT W. NERO, Box 14, 1495 St. James Street, Winnipeg, Manitoba. R3H 0W9

Blue Jays are regular visitors to our yard in a well-wooded section of Winnipeg, where we keep two bird-feeders well-stocked throughout the year. In the past two years we have observed this species feeding on dead birds on three occasions.

My attention was first drawn to a Blue Jay pulling at an object on our lawn about 4 m from a feeder at 10:30 a.m. on 1 October 1989. A few minutes later the first jay was displaced by a second one which in turn pecked at the object a few times and then departed. The object turned out to be a dead Swainson's Thrush, partly plucked in the upper breast region and with some flesh removed, but otherwise intact. It appeared to be about a day old and was presumably a window-kill. I left the thrush lying on the ground. At 11:40 a.m., a Common Grackle walked over to it and weakly pecked at it for less than a minute. All this while, Blue Jays and grackles were nearby feeding more or less continuously on sunflower seeds. Although we did not watch constantly, we saw a Blue Jay feeding on the thrush again at 12:15 noon and from 4:03-4:05 p.m. By this time, the thrush's neck had been severed, though the head was nearby, and about two-thirds of the breast muscle and flesh from the upper back and base of one wing had been devoured.

The following morning, at 7:31 a.m., I saw a Blue Jay fly to the carcass of the thrush and begin feeding. It fed for about a minute and a half before something startled it and it flew away, as did other birds. My wife, Ruth Nero, saw a Blue Jay feeding on the thrush again at 1:30 p.m. When I examined the carcass of the thrush late that afternoon most of the breast bone had been removed, exposing internal organs; much of the lungs and part of the liver were gone.

In two other incidences observed by Ruth Nero, a Blue Jay seized a bird shortly after an observed window-kill. At about 6:45 p.m., 3 July 1990, a jay flew in and carried off a juvenile House Sparrow right after it struck the window and fell to the ground. The jay carried the sparrow onto the lawn about 40 feet away. It was harassed by other House Sparrows and three times was forced to land. It then began jabbing at the dead sparrow's head, whereupon my wife ran out to retrieve the sparrow. The jay remained on the ground, about a foot from the sparrow as she approached, still being harassed by four of five other House Sparrows. When she picked up the sparrow, it was still alive, but unable to fly. The next day, at 8:00 a.m., a juvenile American Robin struck the window with a loud thump; half an hour later she noticed a Blue Jay sitting on the dead robin. She again dashed out and retrieved the dead bird which the Blue Jay apparently had not had time to begin eating.

I cannot recall reading any previous observation of this kind, but given the omnivorous food habits of the Blue Jay, and considering the number of window-killed birds, it would be surprising if others have not witnessed a similar event.

COMMENTARY: BIRD RECORDS IN SASKATCHEWAN AND THE *BLUE JAY*

PAUL C. JAMES and BOB KREBA, Saskatchewan Museum of Natural History,
2340 Albert Street, Regina, Saskatchewan. S4P 3V7, and ALAN R. SMITH,
Canadian Wildlife Service, 115 Perimeter Road, Saskatoon, Saskatchewan. S7N 0X4

With the recent publication of the latest checklist of Saskatchewan birds,[12] we felt it was timely to record some concerns that we have with respect to the reporting of bird records in the province.

The checklist clearly states that unless confirmed by either a specimen or an identifiable photograph, a species remains hypothetical. However, a review of bird records published in the *Blue Jay* for 1989 and 1990 give the reader a quite different impression.

It is not unusual to come across titles of articles that indicate the positive recording and identification of new or hypothetical species without the required supporting evidence.[2,3,4,5,6,7,10,11,15] This contrasts with similar titles of articles in which records have been substantiated.[1,2,8,9,13] This, in itself, would not be a significant problem if the articles were always available and read. However, they are not. The *Blue Jay* is a regional journal that is distributed worldwide, and more importantly, is abstracted by leading indices such as *Recent Ornithological Literature* and *Zoological Record*. These publications record only the title of the article; the researchers compiling species' records will likely take them at their face value. This, we believe, will lead to the further reporting of records that lack substantiating evidence to the ultimate discredit of both the *Blue Jay* and the Saskatchewan Natural History Society.

To avoid this situation, we suggest that the titles of articles reporting bird records without the required evidence should carry prefixes such as "possible" or "sight." This would not only indicate the true nature of the evidence, but would also not discourage the reporting of such observations by field observers.

Furthermore, we believe that the acceptance of species to the Saskatchewan hypothetical list is presently far too easy. This has resulted in a burgeoning proportion (currently 12%) of Saskatchewan's avifauna being of questionable status. This compares with only 4% of Alberta's checklist.[14] We, therefore, suggest that a records committee be formed to not only review new records but also the entire hypothetical list. Such a committee would accept or reject records on the basis of evidence alone, ultimately leading to improved standards of field reporting in the province.

1. BARR, K. 1990. House Finch at Regina, Saskatchewan. *Blue Jay* 48:167.
2. BJORKLUND, C.G. 1990. Bromhead rare bird records. *Blue Jay* 48:212-217.
3. BRAZIER, F.H. 1989. Kentucky Warbler singing in Regina. *Blue Jay* 47:152.
4. —— 1989. Ivory Gull in Regina. *Blue Jay* 47:153.
5. —— 1989. Laughing Gull in Regina. *Blue Jay* 47:157.
6. —— 1989. White-eyed Vireo – first for

Saskatchewan. *Blue Jay* 47:216.

7. —— 1990. Olivaceous Cormorant – first record for Canada. *Blue Jay* 48:154-155.

8. CHYTYK, P. 1990. Saskatchewan's first Black-legged Kittiwake. *Blue Jay* 48:112-114.

9. DECHKA, S.S. 1990. Saskatchewan's first Garganey observations. *Blue Jay* 48:320.

10. HOLMES. P.M. 1990. Scissor-tailed Flycatcher at Eastend, Saskatchewan. *Blue Jay* 48:221.

11. HOOPER, D.F. 1990. House Finch and American Woodcock at Somme, Saskatchewan. *Blue Jay* 48: 47-48.

12. KREBA, R. 1990. Field checklist of Saskatchewan birds. Sask. Mus. Nat. Hist.

13. LAWRENCE, F. 1990. Prothonotary Warbler in Regina. *Blue Jay* 48:45-46.

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Christmas Bird Count Update — Val Marie, Saskatchewan

The following count was received too late for inclusion in the compiled results. The count was carried out on 16 December 1990. Temperature -20° to -10°C, wind light, snow cover was 5-10 cm, overcast with light snow in morning, sunny in afternoon. In total, 13.5 hours were spent covering 148 km by vehicle and 12 km on foot.

Bald Eagle, 1; Northern Goshawk, 1; Rough-legged Hawk, 1; Golden Eagle, 3; Gray Partridge, 12; Ring-necked Pheasant, 82; Sharp-tailed Grouse, 5; Rock Dove, 1; Great Horned Owl, 4; Short-eared Owl, 2; Horned Lark, 125; Black-billed Magpie, 82; Northern Shrike, 2; Snow Bunting, 1,117; Evening Grosbeak, 1; House Sparrow, 186. 16 species, 1,625 individuals.

Observers: Lynn Grant, Allan Hall, Don McDonald, Cheryl Penny, Lise Perrault, Jacques Saquet.

NOTES ON RACCOONS FROM EDAM, SASKATCHEWAN

MURIEL CARLSON, 406 Spruce Drive, Saskatoon, Saskatchewan. S7N 2N4

Raccoons are nocturnal animals, and, perhaps because of this, their tracks are more often encountered than the actual animal. In fact, many sightings are actually records of road kills. A recent sighting at Edam became a minor event when Tom and Marg Terpstra discovered Raccoons. Tom described the encounter:

> "During the night of 1 October 1990, we were awakened by an infernal racket caused by our dogs outside our window. They were barking at something in or near the spruce tree beside the window. We presumed that they had treed a squirrel, or encountered a skunk, and attempted to go back to sleep."
>
> "It was cold and windy, but about 0700 h, I finally decided to check outside. I was surprised to find two Raccoons in our maple tree in the front of the house. Our dogs had treed them during the night, and they had escaped across the roof to the other tree."
>
> "The two Raccoons stayed in the maple tree all day, despite a continuous stream of curious residents who came by to see them, Some people brought cameras, and one family made a short home video of them. Throughout most of the day, the two animals sat near each other on the same branch, but as the day became colder and windier, one crawled up beside the other and snuggled up for comfort. They were very affectionate and one would stroke the other's back. By 2200 h, they had separated, and by 2300 h, they were both gone. The following day, a single animal was reported just west of town where the grid road crosses the Turtlelake River."
>
> "On November 18, we were returning home on the grid road east of Edam at 1750 h and saw a pair of Raccoons scampering in the snow near a clump of willows beside a roadside slough. They were obviously enjoying themselves. That was the last sighting."

Edam is located about 70 km northwest of North Battleford, just one km east of the meandering Turtlelake River, and about 16 km east of the North Saskatchewan River. There are no published Raccoon records from this area, although Sheila Lamont, former *Blue Jay* editor, informs me that she saw Raccoon tracks on Pine Island a long time ago. Pine Island is 20 km west of Edam, in the North Saskatchewan River. As well, a farmer near Vawn, southeast of Edam, claimed that Raccoons were bothering his chickens last year and causing some losses, so he destroyed three of them.

Raccoons are known to like attics and granaries or old buildings. Ray Puddicombe, a retired Conservation Officer with Saskatchewan Parks and Renewable Resources, explained that they also

Raccoon *Gary W. Seib*

like to pry off old shingles to get at flies and insects beneath them. Such action usually renders the buildings unusable in a short time, so farmers show little affection toward them. Puddicombe also stated that Raccoons were reported as far north as Ile-a-la-Crosse 25 years ago. Raccoons are also believed to be responsible for predation of bird nests. This was reported by Dale Hjertaas during a survey of nests of Great Blue Herons in the Qu'Appelle Valley in 1981.[4]

A search of Saskatchewan published recorded sightings in the *Blue Jay* has produced further information about these interesting but often maligned creatures. Raccoons (*Procyon lotor*) are carnivores and members of the family Procyonidae. They are medium sized, fairly chubby mammals with long fur. They have dark coloured rings on their bushy tails, narrow snouts and a distinct dark mask about the eyes. They are nocturnal, or night feeders, and are believed to sometimes wash their food by holding it with their front paws and rinsing it in a stream. Their diet usually consists of insects, mollusks, frogs, shellfish, eggs and birds. If they are present around water, their tracks are distinctive, the prints of their five prominent toes on each foot appearing to resemble tiny hands rather than padded feet, as the first digit is shorter than the others, similar to our thumbs.

W.H. Beck indicated that the known range of Raccoons in 1958 was mostly in extreme southern Saskatchewan, where only a handful of locations had been reported (Estevan, Regina, Carlyle, Disley, Moose Mountain, etc.), all locations that are reasonably near water.[1] He noted, however, that one sighting had been made near Meadow Lake, which is about 150 km north of Edam.

Harris, in 1971, reported several more northerly sightings than Beck, with locations around Raymore, Semans, and Saskatoon.[3] The annual Christmas Mammal Count compiled by him for *Blue Jay* shows that Raccoons have been reported ten times. They were recorded at Assiniboia (1981, 1984, 1987), Round Lake (1976, 1985), Indian Head (1978) and Regina (1979, 1980).

Houston and Houston give a more detailed history of the Raccoons as well as their historical commercial fur values.[5] They refer to many more recent sightings that show an extension of territory much further north, with sightings from Mullinger (1968), Northside (1969, 1970) and Christopher Lake (1969, 1970, 1972).

In 1983, Victor Friesen provided additional information from his own sightings near Rosthern and Blaine Lake, both road kills.[2] He also noted an early sighting by Krivda near Squaw Rapids in 1950.

On 2 February 1991, the author was part of a group of naturalists who journeyed to the Candle Lake area to search for Hawk Owls. While viewing one with our spotting scopes, I noticed fresh tracks of what I believe to be a Raccoon, in the snow at my feet. I pointed them out to Menno Nickel who was closest at hand. Further discussion with Ray Puddicombe revealed that Raccoons, while overwintering in a hibernating state, do not completely sleep throughout the cold weather. They occasionally venture out during mild spells, much like Red Squirrels do in the northern forests.

This indicates that these small animals have indeed invaded the parkland/boreal interface, and members would be on the lookout for evidence of them. Further information about the habits and history of the Raccoon is available free from Canadian Wildlife Service, 115 Perimeter Road, Saskatoon, Saskatchewan, S7N 0W0.

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* * *

A sacred place is one where the Earth's voice
can be heard more clearly. Go to these places and listen.
Once you've heard her, she can reach you anywhere.

F. Lehrman. 1988. *The Sacred Landscape*. Celestial Arts, Berkeley, CA.

WHITE-TAIL TAIL-WAGGING

DAVID L. BRADDELL, Box 304, Reston, Manitoba. R0M 1X0

For years, hunters, naturalists and field biologists have debated the meaning of the behaviour of white-tailed deer when they are alarmed and hurriedly leave a disturbed area. The animals are observed wig-wagging their erected white tails like a piano student's metronome.

Observers have interpreted this behaviour usually in one of two ways. One common contention is that the wig-wagging simply signals danger, and any deer within sight of the signal responds to it and flees.

The other viewpoint contends that white-tail flag-waving is an assertion of leadership to any follower ready to take the leader's escape route. Nature, however, is seldom wasteful. So many signalling leaders and followers are not necessary to point the way to escape and to use all the participants's energy merely to "mark time" while the animals flee. Then what does all that wig-wagging really mean?

A few close observers of the behaviour of white-tails when startled to flight, especially R.D. Lawrence, celebrated Canadian author-naturalist, have noticed that these animals, whether spooked by humans or natural predators, may scatter widely, thus refuting the notion of any simple escape plan of leadership being used. And flight alone is signal enough to more than suggest the closeness of danger. If these deer closely followed a leader along a narrow escape route, all the while briskly wig-wagging, such behaviour would refute any natural design to minimize attention upon each animal and lessen its use of energy.

This line of thinking suggests wig-wagging of tails has another and more practical interpretation — one of behaviour meant to preserve the species, not the individual. This objective is achieved through all members of an escaping herd wig-wagging, not to target individual animals but to confuse and disturb predators, thereby breaking the concentration and energy flow of the deer's attackers. Thus the behaviour of the deer increases the entire group's chances of escaping harm or death.

This interpretation of white-tail tail-wagging supports the conclusion of experts of timber wolf behaviour: that when wolves hunt deer, only one out of ten attempts, on the average, ends with a kill. Thus nine failures to capture prey may be due to the wolves' confusion and interruptions of their hunting momentum, caused by the tail-wagging of the deer.

MUMMIFIED BATS AT THE PAS

WALTER KRIVDA, Box 864, The Pas, Manitoba. R9A 1K8

Recently some students brought me six specimens of bats. They are dry and perfectly preserved. The students explained that they found the bats in a cottage that wasn't used for a whole summer. The very clean air at the lake and the dry environment of the cottage helped preserve the bats.

Usually to preserve any mammal specimen, one must skin it, treat the pelt and sometimes paint insecticides on the inside to prevent future attacks by museum pests such as common Bacon or Larder Beetles.

The specimens are solid. They are hard and dry like a board and have been saved as demonstration specimens in the writer's collection. The drying process was evidently gradual so that the complete structures of the ears are well preserved, as can be seen by inspection with a magnifying glass. The nose and nostrils are similarly in good condition. It is possible that the wide expanse of the bats' wings promoted the evaporation of body fluids and helped with the drying and production of bat mummies. Surely these are the first for the north country.

* * *

The water which softens us as it circulates through
each cell has already been down every river and slept
in every ocean. The blood of the land is the river of the body.

F. Lehrman. 1988. *The Sacred Landscape*. Celestial Arts, Berkeley, CA.

YOUTH

EARTH POETRY

The following poems were written by a Grade 10 student, Deni-Vermai Messer, 515 Perreault Way, Saskatoon, Saskatchewan. S7K 6B7

THE PRICE OF PROGRESS

The insidious creeping of the
concrete jungle
Stealthily covering the verdure of
farmland.
The crows have become seagulls
Perching on tall green lamp-posts
The sounds of stillness and peace are
replaced by
The many objects of individualism.
Pollution pours out of fast growing
factories
Acid rain destroys our forests
The smog erases the sweet smell of
nature after rain and
The ever present song of birds.
Murky rivers run thick with progress,
The price of success.

The guns blast killing off the beauty
in our world.
Ornamentations of creatures lost and
destroyed are erected.
Paved streets cover the humble paths
of our ancestors.
Uniqueness is forgotten in uniformity
Parallels are drawn to indicate
continents;
United voices once had the same effect.
In the voice of progress our heritage and
livelihood
Is being discarded.
Our harmful chemicals and garbage
heaped upon the land.
Our nations are answering the call of
materialism
In an age of the disposable and
discarded.
The price of success.

A CRUDE SOUND

The Black Ebony of destruction,
Crawls relentlessly onward,
Covering a sea of life.
A Black Widow with a purpose,
Reaching and stretching in all directions,
Limiting all species to extinction;
Forming an arabesque pattern of demise.
The Black mask covers all with
stunning finality,
The thief of life, inspiring horror.
Ecosystems are pushed to their
extremity and,
The shores of life are lined with death.
Crossbones and Skull the symbol that,
Hangs in the frigid air of the
Northwest as
The august presence of Black Gold,
Smothering all the dissolution.
This pestilence enveloping,
Choking the life from its victims,
Yet man gazes on in indifference.

MASSACRE

Thousands of dolphins murdered for
profit;
Screaming in agony and threshing in
terror,
Thrown in the gaping jaws of powerful
machines,
Crushed alive amid human laughter.
From gentle creatures peal cries of
betrayal
Sounding over the sea to be drowned in
the blackness of error.

NATURE LIBRARY

VANISHING ANIMALS OF THE WORLD

CLIVE ROOTS and PETER KARSTEN. 1988. Hyperion Press Limited, Winnipeg, Manitoba.

The book that I'm doing this report on is called *Vanishing Animals*. It tells about different animals from all over the world that are vanishing more quickly. This book is a colouring book with pictures of the animal with a story of the animal beside it. The idea of a colouring book was great, because it makes reading it more fun. I had to do a report on mammals and this book helped me. All the information I needed about the animals was there. And all the questions I had about the animals were there too. If you are doing a report or just want to find out more about animals, birds, or reptiles, I highly recommend this book. It gave me good information on what I can do to help prevent animals from vanishing.

If you want to find more information about this book I'm sure it would be in a local book store. There are other books in this series. Here are some names: *Small Mammals*, *Large Mammals* Volumes 1 and 2, *Birds* Volumes 1 and 2, *Insects, Wildflowers, Trees, Time and Life* (fossils), *Fish, Butterflies and Moths, Owls of North America* and more. I really encourage you to use the books for information and fun. I found it easy to colour and understand what the author means. He or she has a good way of describing the animals. I also like the style of the author's writing. It's not too long or too short, has all the information a person would need and is easy for kids of all ages to read, understand and colour. There wasn't anything about this book that I didn't like and I enjoyed it very much. I also enjoyed *Extinct Animals of the World*.

Reviewed by *Ingrid Pederson* (age 11, Gr. 6), 23 O'Neil Crescent, Saskatoon, Saskatchewan. S7N 1W7

EXTINCT ANIMALS OF THE WORLD

CLIVE ROOTS and PETER KARSTEN. 1988. Hyperion Press Limited, Winnipeg, Manitoba.

I thought this book was very interesting. Each story answered any questions you would have about the animals.

I think books like these are good. They remind people of how they are destroying the environment and killing defenceless animals.

The stories were sad because the animals' enemy was always people. This book helped me see things from their side.

I liked the pictures because they were very realistic. The one problem is that the people that would enjoy this book wouldn't be interested in colouring the pictures.

I think people my age and older would like this book. They are too old for colouring books, though. In my opinion, this would make a very good book, if it wasn't a colouring book. It should still have pictures, but already coloured like the cover picture of the quagga.

Reviewed by *Erica Pederson* (age 13, Gr. 7), 23 O'Neil Crescent, Saskatoon, Saskatchewan. S7N 1W7

VENOMOUS ANIMALS OF THE WORLD

CLIVE ROOTS and PETER KARSTEN. 1988. Hyperion Press Limited, Winnipeg, Manitoba. 40 pp., paper.

This volume of the superb Wilderness Album Series (first entitled Canadian Album Series), Nature Stories for Children, does not disappoint. It follows the familiar pattern of a full page, detailed picture to colour faced by a page with an interesting story and scientific information about each subject.

The stories are all good and at least one is a cliff hanger! My mouth was agape as I read of Black Jake, the outlaw, getting his comeuppance from a gila monster in Gila Bend in 1876.

When I read the Honey Bee story, whose central character is a six-year-old Ukrainian lad watching over the family's beehives, I was amazed at the details given of the Bee-eaters (*Merops apiaster*) which came to plunder the hives:

> "Boris was sitting quietly and daydreaming when he heard a tapping sound coming from above him. He looked up. Perched on a branch just above his head was a lovely male bee-eater. It had a bee in its beak and was beating it against the branch to kill it. When it was satisfied that the bee was dead, it held it by its abdomen and squeezed it hard, at the same time rubbing it against the branch. Boris realized why the bird was doing this when he saw the venom squirt from the bee's body. Then the bee-eater swallowed the bee and flew back to the hives."

I couldn't wait to find out more about this fascinating bird.[1,2,3,4,5] The author has done a wonderful job of whetting the appetite for the animals presented here.

My fingers itched to get out my crayons and colour the pictures, and indeed, I did so. I am fussy and followed the description of colours given for each animal, but there is plenty of scope for "artistic licence" in these fine drawings.

The Wilderness Album Series works best as a joint parent-child activity. The adult may read the story while the child colours. Though the stories are short, they are fairly complicated; one could not expect most young children to read them on their own. However, read aloud they are superb and provide a focus for discussion about the subject on each page. The scientific information provides help for the parent (or teacher) who will be bombarded with the inevitable questions: Where? How? Why? What? and paves the way for further research on the animals.

When I was manager of the Blue Jay Bookshop and first saw this series, I was much impressed. I have not changed my mind. Buy them for all the children on your list. Buy them for yourself!

1. AUSTIN, OLIVER L., JR. and ARTHUR SINGER. 1983. Birds of the world. Golden Press, New York.
2. BRUUN, BERTEL and ARTHUR SINGER. 1971. Birds of Europe. Golden Press, New York.
3. HEINZEL, HERMANN, RICHARD FITTER and JOHN PARSLOW. 1984. The Birds of Britain and Europe with North Africa and the Middle East. Collins, London.
4. PERRINS, DR. CHRISTOPHER M. and DR. ALEX L.A. MIDDLETON, Editors. 1985. The Encyclopedia of Birds. Equinox (Oxford) Ltd., Oxford.
5. SKUTCH, ALEXANDER F. 1976. Parent birds and their young. University of Texas Press, Austin and London.

Reviewed by *Carol Bjorklund*, 3634 McCallum Avenue, Regina, Saskatchewan. S4S 0S5

A PRAIRIE COULEE

THOMAS WILLOCK. 1990. Lone Pine Publ., Edmonton. 95 pp., illus. colour and b/w, soft cover. $8.95.

"This little book is about ... the role of the coulee in the ecosystems of the northern plains including the landscapes of the southern portions of Manitoba, Saskatchewan and Alberta as well as much of Montana, Wyoming, North and South Dakota and Nebraska" (p. 15).

The author, now a zoologist and photojournalist, grew up along the Alberta-Montana border. No one particular coulee is described but the text and illustrations mostly reflect the author's experience and knowledge of the Milk River Valley in southern Alberta and adjacent coulees.

The text contains short introductory and closing chapters and three main chapters, "Plants, the colour of the coulee," "Birds," and "Mammals." The book is beautifully illustrated with photographs taken by the author. Each photograph is briefly described and the plants and animals (including several reptiles) are identified by English and scientific names.

The book is interestingly written and it describes "bits and pieces of the life histories of selected plants and animals" (p. 16). The author recognizes the coulee as a complex community of many organisms – plants, animals and many micro-organisms. By discussing the interrelationships of some of the larger and more conspicuous organisms he has made a beginning to man's understanding of the ecology of the coulee.

The author is obviously interested in coulees, which are still largely natural and unmodified by human use and exploitation. These areas, wherever they may be, are very precious and beautiful and must be protected. The more we know about the complex relationships of the many organisms of the coulee the more we will want to preserve that ecosystem.

Willock, by writing about some of the more obvious relationships, has made a beginning. Now he, also botanists, microbiologists, and others with different backgrounds should write additional books describing other aspects of the ecology of prairie coulees. There are many avenues for study and research in the ecology of such areas.

I read the book with interest and pleasure and I hope that there will be many additional books on this and similar ecological topics. I did not look for, or expect to find, any errors, but I did notice one. Plate 18 is identified as "Silverweed' (*Potentilla anserina*) – A showy yellow-flowered cinquefoil." This is clearly an error, though one leaf of Silverweed is shown along the lower margin of the photo left of centre. Actually the photo shows some 50-70 yellow flowers of the Seaside or Creeping Buttercup (*Ranunculus cymbalaria*) which is in a different family. This species of buttercup grows in the same kind of habitat as the Silverweed.

Reviewed by *George Ledingham*, 2335 Athol Street, Regina, Saskatchewan. S4T 3G4

BUTTERFLY GARDENING — CREATING SUMMER MAGIC IN YOUR GARDEN

Xerces Society/Smithsonian Institution. 1990. Sierra Club Books, San Francisco. 192 pp. Illus. 117 colour photos and 7 paintings; paperback; (18.5 x 23.5 cm).

This is a book of 14 chapters by ten specialists. Following are some excerpts:

> "Butterflies ... are like dream flowers ... broken loose from their stalks and escaped into the sunshine." *Miriam Rothschild*

> "I am very concerned about what I call the extinction of experience .... When we lose the common wildlife in our immediate surroundings, we run the risk of becoming inured to nature's absence, blind to delight, and, eventually, alienated from the land." *Robert Pyle*

> "In the United States, some 220 acres of land are lost each hour to highway and urban development .... Of approximately twenty thousand species of native plants in North

America, about three thousand are at risk of extinction .... Taking into consideration all the plants and animals in the world, some biologists estimate that there is one plant for every seven to fifteen animal species. Therefore, the loss of a plant affects the ecology of a number of animal species." *David Northington*

"The reintroduction of natural landscape elements into urban and suburban neighbourhoods that are otherwise dominated by introduced species may be the greatest contribution to ecosystem conservation that ... [an individual] can make." *Dennis Murphy*

"The gentle art and pleasure of gardening for butterflies is one way to light a slender candle of hope as the relentless forces of humanity disturb, fragment, homogenize, and destroy the natural habitat, snuffing out the shining lights of individual species one by one." *Stanwyn Shetler*

"A butterfly garden is not at its best if the only goal ... is to attract hordes of butterflies. The true pleasures are memories that endure long after the butterflies have been buried under a frigid blanket of snow. An event witnessed once in a lifetime can be relived year after year as long as flowers bloom and memories endure." *Jo Brewster*

"Examine the garden you have. Can you see it from your living room or your kitchen? ... porch? ... lawn chairs? ... Does it receive enough sun? ... do you need to move plants to provide more sun? .... Butterflies also need wind protection.... Gardens and gardeners develop gradually.... Small Butterfly-Garden layouts.... A pleasing native plant in one area of the country can become a menace in another – an invasive, destructive weed.... The Master Plant List includes thirty flowering plants that butterflies use for nectar ... {including their blooming seasons and} ... represents our first choice of plants for a butterfly garden...." *Mary Booth* and *Melody Allen*

"But you can really abandon any romantic idea of creating a home for these angelic creatures — the best you can do is to provide them with a good pub. And like all popular wayside inns, it must have a plentiful supply of standard drinks always on tap." *Miriam Rothschild*

"Many small blues and coppers live only a few days.... Monarchs, mourning cloaks, and many moths are adults for six to ten months." *Dave Winter*

"We have recorded eighteen species of New England butterflies nectaring at ... the common milkweed, one of the most important of all butterfly nectar plants.... Picking a spot in a sunny but unobtrusive place in your own yard for testing various butterfly recipes is not a bad idea. Overripe fruit makes an excellent lure, and a simple banana mash is tough to beat." *Jo Brewster*

"When darkness deepens ... a flashlight subdued with a filter of yellow or red plastic [may reveal] a pinhead-sized coppery glint from the hovering ... [moth's] compound eye." *Dave Winter*

"The rewards of butterfly watching are many and its pursuit is simple. Expenses and equipment needs are few. All you have to do is find butterflies, clear your mind, really open your eyes, and literally see what happens. I know of no better place to do it than in a butterfly garden." *Robert Pyle*

> "APPENDIX A: Nectar Plants for North American Butterflies and Moths" [More than 80 plant species found in the Prairie Provinces.]
>
> "APPENDIX B: The Most Familiar North American Butterflies and Their Larval Food Plants" [More than 50 butterfly species found in the Prairie Provinces.]

[Some local nurseries and commercial seed dealers sell wild flower seeds. For an annotated bibliography of butterfly identification guides, please see the June 1989 *Blue Jay* (47:83-88).]

Compiled by *Bernie Gollop*, 2202 York Avenue, Saskatoon, Saskatchewan. S7J 1J1

FIELD CHECKLIST OF SASKATCHEWAN BIRDS (7th edition)

Compiled by ROBERT KREBA. 1990. Saskatchewan Natural History Society, Box 4348, Regina, Saskatchewan. S4P 3W6. $0.40 each or three for $1.00.

This new edition of the Saskatchewan Checklist adds 23 species to the province's list since 1983. Two of these occurred as a result of splitting of the Western Grebe into two species, Western and Clark's Grebes, and Yellow-bellied Sapsucker into Yellow-bellied and Rednaped Sapsuckers. Both of these new species are fully documented in the province. Seven additional species have been recorded and identifiable photographs or a specimen obtained: Garganey, King Eider, Mississippi Kite, Slaty-backed Gull, Black-legged Kittiwake, Black Guillemot and Hooded Warbler. Seven species formerly on the hypothetical list are now documented (Yellow-crowned Night Heron, Barrow's Goldeneye, Western Sandpiper, Band-tailed Pigeon, Mountain Chickadee, Prothonotary Warbler, and House Finch). The Eurasian Widgeon, formerly considered a documented species, has been lowered to hypothetical as the photographs have not been located. Two introduced species which have failed to maintain populations in the wild (Mule Swan and Chukar) have been deleted resulting in 349 documented species for the province.

The hypothetical list now stands at 46 with 14 new species being added (Common Eider, Bar-tailed Godwit, Purple Sandpiper, Rock Murrelet, Acadian Flycatcher, Gray Flycatcher, Blue-gray Gnatcatcher, Curve-billed Thrasher, White-eyed Vireo, Great-tailed Grackle and Cassin's Finch).

The checklist is graced with an excellent sketch of the Eastern Kingbird, one of our apparently rapidly disappearing neotropical migrants. The checklist appears free of typographical errors and is in my opinion an accurate list of Saskatchewan birds.

Reviewed by *Wayne Harris*, Box 414, Raymore, Saskatchewan. S0A 3J0.

* * *

A Bohemian Waxwing in England was observed to eat 390 Cotoneaster berries in 2.5 hours. *British Birds* 54, no. 1:39-41.

“SASKATCHEWAN’S NORTH”

MYRON BARTON, R.R. 5, Site 16, Box 51, Prince Albert, Saskatchewan. S6V 5R3

SASKATCHEWAN’S NORTH

I’m Saskatchewan’s North, a special
place
With pristine lakes, streams and marsh.
My waters clear and forests tall
Provide a living for you all.

A cradle of life for a million years,
For mammals, birds and human kind.
All God’s creatures, big and small;
I yield my bounty to them all.

These effects I freely give,
Take whatever you may need.
Lumber, furs, pulp and fish,
But do leave some, I dearly wish.

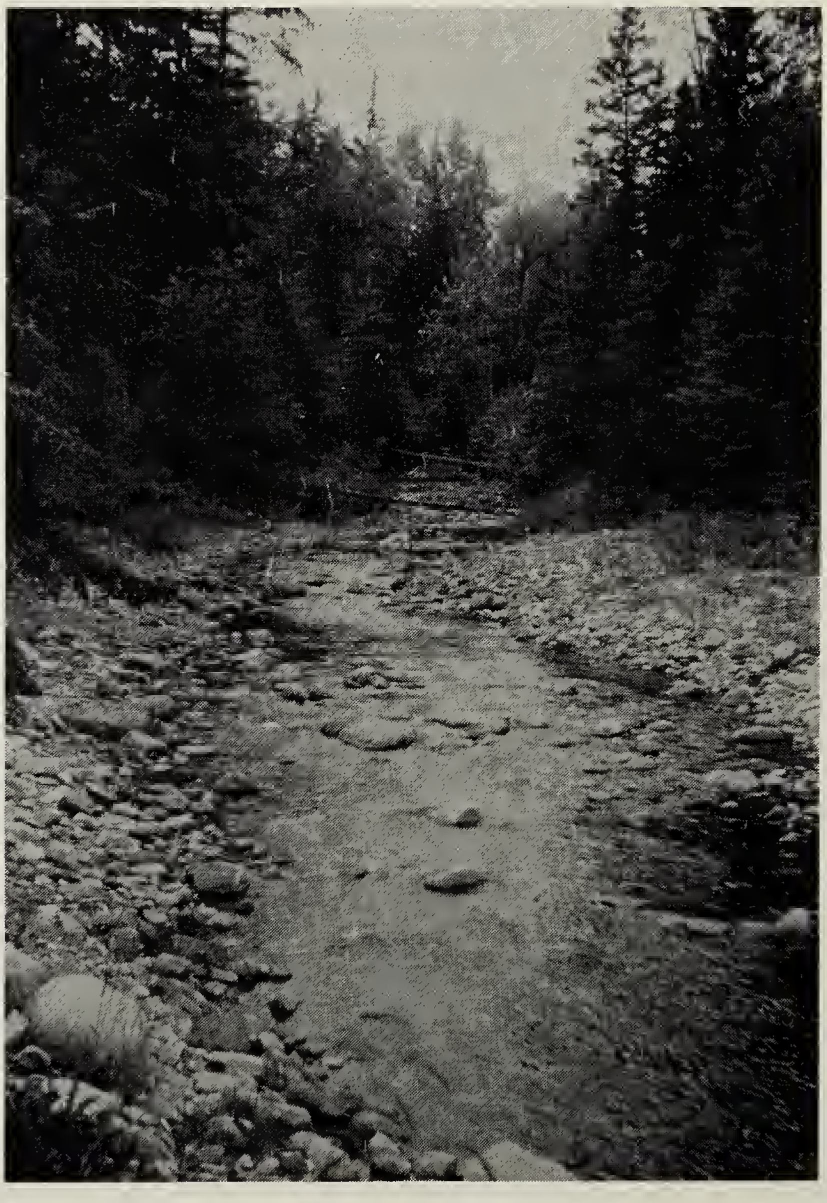
So take from me only what you need;
Leave a share for those to come.
Be careful how my scape you scar,
And protect my treasures for what they
are.

Fiery sunrise, Prince Albert National Park *S. Ross*

Aspen Stand, Prince Albert National Park *K. Strange*

Wayne Lynch

Shady Lake, Prince Albert National Park *Merv Syroteuk*



Waskesiu River *Chris Adam*

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